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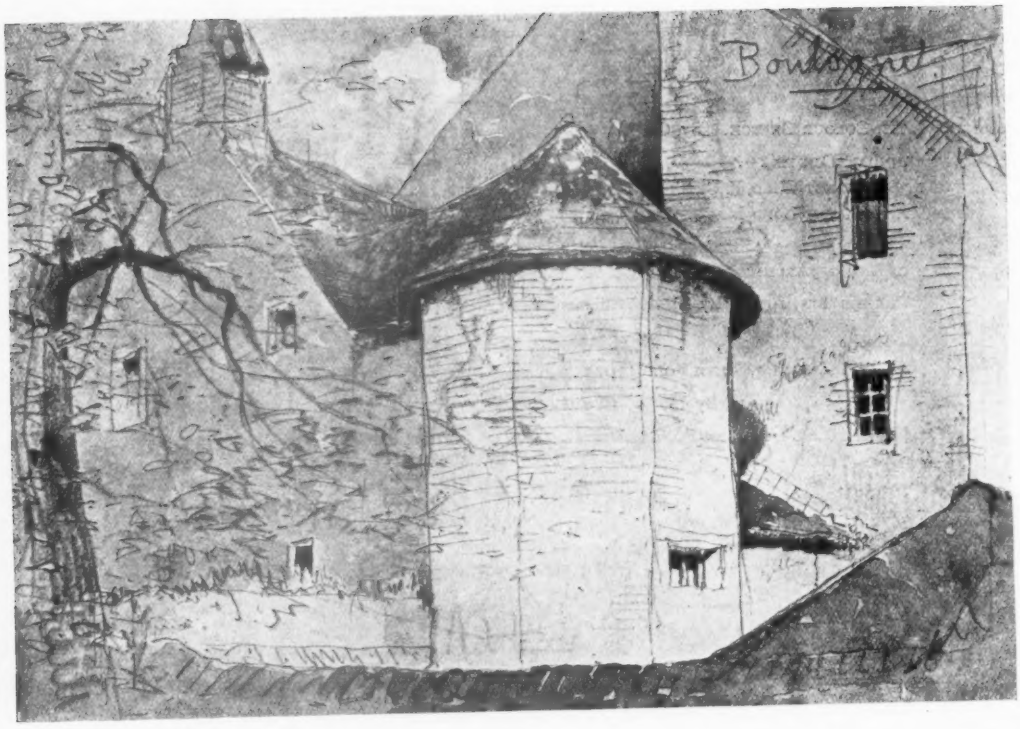

BOULOGNE

Water Colour Sketch by George Devey, F.R.I.B.A. (1820-86)

R.I.B.A. Collection

VOL. XXXVII. No. 15 7 JUNE 1930

The R.I.B.A. Annual Dinner

(Held at the Guildhall on Thursday 15 May 1930)

THE Annual Dinner of the Royal Institute took place, through the kindness of the Lord Mayor and Corporation, at the Guildhall, City, on Thursday, 15 May 1930, when the chair was occupied by the President, Sir Banister Fletcher, F.S.A.

Following the toasts of " His Majesty the King," " Her Majesty the Queen, H.R.H. the Prince of Wales, and the other Members of the Royal Family," proposed by the President,

SIR ERNEST WILD, K.C. (Recorder of London), proposing the toast of the " Royal Institute of British Architects," said : Technically, I am entirely unfitted to propose the toast of the Royal Institute of British Architects, as I know nothing technically about architecture. But technical knowledge may not be necessary rightly to appreciate a great subject. One may be fond of poetry without being able to compose an ode ; one may delight in music without being able to play a note ; one may enjoy a beautiful picture without being able to handle a paint brush ; and one may listen with rapt attention to oratory without being able to make an after-dinner speech. I have gone to the Principia of your Institute, and I have studied the words of your Charter of Incorporation, which was granted to you by King William IV in the year 1837, and these are some of the words that I cull from that document. You received your first Charter " for the general advancement of Civil Architecture . . . it being an Art esteemed and encouraged in all enlightened nations as tending greatly to promote the domestic convenience of Citizens, and the Public improvement and embellishment of Towns and Cities." That is the reason why you are the Royal Institute of British Architects. Right faithfully have you deserved the Royal confidence. For you have advanced the art of architecture, and you have controlled and organised architectural education ; so that you have become a great Imperial organisation comprising, wherever the British Flag flies, Allied Societies of more than ninety architectural bodies, and a membership of 15,000 architects and students. One may say that your grain of mustard seed has become a tree. Unfortunately, you are doomed to avoid the limelight —or, rather, it avoids you—for when there is a public function to open some important building, the Press will tell you all about the contractors, possibly also about the sub-contractors, certainly about the Member of Parliament who lays the foundation stone, but not a word about the architect. But then we are told that Solomon's Temple was built without sound of axes and hammers. Anyhow you have, materially, spiritually and psychologically, helped to mould the character of the citizens of this Empire. For does not a man's house become part of the man ? Does it not help to make the man's character ? Do not public buildings help to make or mar cities, just as thatched roofs may help to make, and petrol may help to mar, the countryside ? We pray you to continue to create things of beauty. Ye are as gods knowing good and evil, and we believe that we Philistines may confidently rely upon you technical experts to create masterpieces and not monstrosities, to make our cities not only habitable but places of which their denizens may be proud.

So much for the character of the building. What of the character of the builder ? I am privileged to couple with this toast the name of your President, Sir Banister Fletcher. I do know something about him—I here deal with a subject on which I am qualified to speak. I should say of him that he is the son of a

distinguished architect, and that is a good start. He is a much-travelled man, and thereby he has acquired the necessary culture for his art. He is a designer of buildings of distinction. He is an erudite writer and lecturer upon his great subject, and—what is more important than that—he is a many-sided man. He is not limited to his one subject, important though that is. In the first place, he is a barrister-at-law. He is a member of a profession which is Jack of all trades and master of none, but to which all trades confidently resort when they want their differences satisfactorily and comparatively cheaply settled. He was, over a decade ago, one of the most popular of the Sheriffs of the City of London. And, lastly, as a member of the Court of Common Council, he has done much to preserve nineteen City churches from—in the pagan name of utility—being destroyed, and thereby, to that extent, destroying the spirituality of the City. Also he has helped to prevent a scheme which, in his judgment, would have imperilled the not-too-secure foundations of St. Paul's Cathedral. The reason the St. Paul's Cathedral foundations are insecure is because, unhappily, Sir Christopher Wren commenced life as an astronomer. He never studied the elementary rudiments of his profession, and therefore, though he was a great architect, he was never a member of the Royal Institute of British Architects, which was then unborn. I do not want to enter into controversial subjects, such as "The Battle of the Bridges." Far be it from me, particularly in this atmosphere, to touch upon that subject; where should their site be? Should it be St. Paul's? Should it be Charing Cross? That is a quarrel that remains to be composed; probably Father Thames will never again be spanned in our lifetime. But when we come to the site of this Banquet, when we come to the place where, above all places, Sir Banister Fletcher should be honoured, there will be no quarrel as to the site of his triumphal arch.

The PRESIDENT, in replying to the toast, said: My Lord Mayor, Sheriffs, Sir Ernest Wild, My Lords, Ladies and Gentlemen.

It is with pride and satisfaction that I rise as President to reply to the toast of the Royal Institute of British Architects in this ancient Guildhall of our old City of London, where I have for 20 years taken part in many historic functions.

It is also a great pleasure to me that this toast has been proposed by my friend, the learned Recorder of London, and though he has been much too eulogistic of myself, we are grateful for the appreciative manner in which he has dealt with the Royal Institute of British Architects.

There is a certain liveliness in the architectural atmosphere at the present time, which I trust is not due to my accession to the Presidential Chair, though I must admit that I have been involved in many recent architectural storm-centres, and so I must be somewhat circumspect in the way I reply to this toast.

In any case, I should find myself at a loss for suitable words to set out the activities and importance of the Royal Institute which "was founded to uphold the character and improve the attainments of the architect," and now, within 4 years of its centenary, has become recognised as the Arbiter of Architecture throughout the British Empire. It is, I think, not generally realised that the Royal Institute is a genuine Empire product, rooted in the old country, and with living branches in the Dominions across the Seas, so that at Christmas I was able to exchange Presidential greetings with our colleagues in Canada, South Africa, Australia, New Zealand, and the Crown Colonies. This made me realise that upon the Royal Institute of British Architects the sun never sets! Thus does British architecture, with its great traditions, encircle the world, and is far more widespread than was that of the Roman Empire.

The first meeting of the founders of the Institute was held in the Thatched House Tavern, and now, with nearly 100 architectural societies in alliance with us, we have over 15,000 architects and students within our fold, and consequently the Royal Institute has a wide and established authority and demands a high standard of professional practice and etiquette.

We continue to be consulted by His Majesty's Government, by ecclesiastical, municipal and other authorities all over the Empire, on architectural matters generally, including competitions, assessorships and arbitrations—all of which indicates universal confidence in our advice.

The architect of to-day has to be ready for all emergencies and invulnerable at all points. He must not only be an expert planner but is expected to know about the wayward ways of water, the caprices of electricity, the intricacies of plumbing, and the possibilities of gas—besides the proper and economical use of every kind of material. He should be something of a lawyer, and, as trustee for his client, should make his plans suit his client's purse.

The Royal Institute realises the increasing importance to architects of a sound and sufficient education and training to meet the requirements of their exacting art, and therefore guides and largely supports architectural education throughout the Empire at a cost to us of some £12,000 a year, so that architects were never better equipped than at the present time.

Our institute possesses the finest architectural library in the world, and with its Journal, Kalendar, Lectures, Exhibitions, Committees, Congresses, Prizes, Studentships and Examinations, it carries on work of a truly Imperial nature.

We now hope to secure an Act of Parliament which will provide for the registration of every qualified

architect—an arrangement for protecting the public which exists in many countries.

We have a fine site in Portland Place for our new Headquarters, for the design of which we are inaugurating a Competition, in accordance with our views for dealing with important buildings. It is a far cry from the Institute's first hired rooms over Thackeray's noisy " Cave of Harmony " in Evans' Coffee House, Covent Garden, to the stately respectability of Portland Place.

It is noticeable that in recent years there has been an increased public interest in architecture which has doubtless been promoted by facilities for travel, by the general practice of photography and by the illustrated Press, so that many people now have a useful knowledge of its historical development. In order to mould public taste and create a love of beautiful buildings, the Royal Institute provides lectures on architecture to children, who are our future citizens, and many of the Public Schools have taken up the subject, while the University of London gives a Diploma in Fine Art in which the History of Architecture is included.

Outside our professional work, architects now can and do give their time and ability in voluntary service to the public, on local authorities, advisory committees, and Panels of Architects, not only to provide good buildings, but to preserve them.

We can never sufficiently appreciate our heritage of noble buildings. What would England be without her architecture, the stage and setting of our island story? Just as the theatre is the glass of fashion, so is architecture a lithic history of each period. Cathedrals, castles, palaces, manor houses, parish churches, town mansions, colleges, cottages and market crosses—all these make England a treasure house of beauty in buildings, and of interest to those who have the knowledge to appreciate architecture and to capture its romance.

There are marked new developments in present-day architecture, but its ultimate tendencies are not easy to foresee, for, although founded on tradition, it must adapt itself afresh to modern needs and respond to the requirements of the social forces which are unfolding in our midst. Moreover it has often to be carried out in new materials, under changed conditions of labour, and with a stricter eye to economy. Thus, in its responsiveness to human requirements, architecture is the most democratic of the Arts, it walks hand in hand with us in our daily life and supplies the buildings for a greater variety of civil, social and public undertakings than in any previous age.

There is a great wave of building activity and a great revival of the civic spirit both in town and country to-day. Here around us, the City of London is being rebuilt and its scale is being changed by the erection of huge storied blocks which vie with each other in height, much as did the family Towers in Mediæval Italy. Amid these modern monsters our mediæval Guildhall looks shy and modest.

If we turn to the country, we find that Regional Planning committees are promoting much architectural development, and we may well be proud of many housing schemes, which show a distinct advance on any previous planning of family homes. I am convinced that the whole of England—including built-up areas—should be placed under all-embracing Regional Planning Schemes, which should include power to act under architectural advice in regard to the external design of buildings if we would safeguard the charm of the countryside.

It must, indeed, be obvious that while we are erecting fine Cathedrals, Town Halls and University buildings in our Cities, it is unseemly that obtrusive Petrol Stations, ugly Garages, and unsightly Bungalows should mar the beauty of quiet country places, and public authorities should have power to control " Ribbon " development and to prevent the erection of roadside abominations, for the countryside lies open and helpless ready to be exploited for utility divorced from beauty. Meanwhile the voluntary work of the " Council for the Preservation of Rural England " is actively carried on by some of our members, including Lord Crawford and Balcarres, Mr. Guy Dawber, Professor Abercrombie and others.

It is matter for regret that the destruction of fine old buildings—large and small—goes on apace, and we are informed that a Cotswold Cottage has just now been carted away to America. Old buildings of character are national assets and should, where possible, be preserved, though it may be to serve another purpose, as with the mansions of Stowe, Bryanston, and Weston Birt, which have been adapted for schools. We have had much too lively a time of late in the architectural world as to these matters of destruction, preservation, and construction.

We must heartily congratulate the St. Paul's Cathedral Authorities and the *Times* on the completion of the work of preservation of the Dome, while not forgetting the necessity which still exists for protecting the foundations.

Among other matters to which we can refer with satisfaction are (*a*) the defeat of the proposed St. Paul's Bridge, (*b*) the saving from destruction of 19 condemned City Churches by the Corporation of London, and (*c*) our apparently successful protest against the official plans for buildings on the Calton Gaol site in Edinburgh.

The rejection of the official Charing Cross Bridge scheme by a Committee of the House of Commons has come with a sense of relief to those who desire a dignified Town Planning scheme for the centre of London. Public attention is now focused on this problem, the bridge is urgently needed, and the Royal Institute is ready, as it has always been, to co-operate

in securing a scheme worthy of this important site.

Thus you will realise that in matters of architecture we have had our own " safeguarding " duties to attend to, and I fear that they have often been of as contentious a nature as the " safeguarding " duties in industry.

In conclusion, let me say that in all our activities and undertakings the Royal Institute of British Architects stands for the advancement of architecture and for the cultivation of the spirit of civic pride which now, as ever, produces noble buildings.

In short, according to our original Charter, architecture is an " art esteemed and encouraged in all enlightened nations as tending greatly to promote the domestic convenience of citizens, and the public improvement and embellishment of towns and cities."

I again thank the learned Recorder for his eloquent words of appreciation and you, my Lord Mayor, Sheriffs, My Lords, Ladies and Gentlemen, for the manner in which you have received the Toast of the Royal Institute of British Architects.

Sir HERBERT BAKER [*F.*], in proposing the toast of the Lord Mayor, the Sheriffs and the Corporation of the City of London, said : I can assure you, my Lord Mayor, and I know I can speak on behalf of my fellow architects, that we thank you for allowing this dinner to take place in your magnificent and historic Hall. Speaking as one who has spent most of his life in distant parts of the Empire, where everything is new and in the making, I would say what a privilege I have felt it to be to work in this historic City, with its great associations. It has been a great wonder to me, as I worked, to realise the richness of those associations. In one small site in Lombard Street, where I am privileged to work, there existed the inns where the great companies met, the East Indian, the West Indian, the Merchant Adventurers, the African, the Virginian, and the Muscovy Company, England's attempt to outdo Columbus. You may say that in that small spot of the City you have all the Arthurian romance of the British Empire, and we are trying to preserve these historical associations built into the fabric of that building. At the Bank of England we are preserving all that we possibly can of the old buildings, and what we cannot preserve in actuality we are preserving in the spirit. Therefore I feel that these ancient architects, were they to see the completed building, would not feel that we have treated their building disrespectfully. We are there, under the inspiration of the Governor, painting on the wall, what the Governor has called " The Bank in being." We are portraying, with the aid of some of the great painters, not only the portraits of the Governor and directors, but officials, from the top to the bottom, those who load, carry and weigh the shining gold and the porters and guards in their beautiful uniforms. And, in order to give the painters the opportunity of design and decoration, we are painting as a background the architecture which has existed and has to be pulled down. I feel that that kind of expression of the ancient history is a great opportunity for architects. My Lord Mayor, there should be a Society for the Preservation of the History of Ancient Buildings in the City. That is our architects' great opportunity. to preserve, through the aid of the sister arts, the historical associations of the buildings and sites with which we are concerned. It has been well said that to know the truth you must have a long memory as well as insight in the present and foresight for the future. That truth, I think, applies to architecture ; it exemplifies Sir Christopher Wren's great saying, that " Architecture must have the attributes of the Eternal." It is a great truth. Modernists belie this truth in the name of which they boast, or so it seems to me. Here in this historic hall associations of the City of London are centred, all the great men, the merchant adventurers of the City of London have been here, three hundred years before and three hundred years afterwards ; so this is the great centre, the Ομφαλος γης of the Empire.

The Rt. Hon. The LORD MAYOR OF LONDON, in responding, said : I wish to refer to one point to which architects might well devote some of their attention and their great ability, and that is the subject of acoustics in public buildings. I believe there are methods to-day by which the acoustics can be made absolutely perfect, but it was not the case in the old days.

Sir Banister Fletcher, I think, is responsible for a statement referring to this ancient Guildhall appearing in the fore part of your menu, " the surrounding buildings have been of gradual growth." Does not that express what has happened in many places ? Things have been of gradual growth, without any system at all, and without any consideration for beauty of architecture. Sir Herbert Baker is a very distinguished architect who is, at the present time, I suppose, gradually shutting out some of the light from my present abode, the Mansion House. And he is not the only one. He may be responsible, too, for some of the other buildings which are going up in the neighbourhood of the Mansion House.

I only want to say one thing about the bridges—and please understand it is only my personal opinion from observation—go on to the bridges which serve the City, and see if they are full. No. It is not necessary to have additional bridges in the City. What is necessary is to get rid of the traffic which comes off those bridges ; have proper communication to those bridges, and then, as far as the City is concerned, you will get rid of the difficulties of the traffic surrounding the bridges. Whatever bridge may be necessary for London outside the City, I fervently hope that the

Corporation, or the Bridge House and Estates Committee, will always take a long and broad view, and that they will devote their resources, when the time comes, not necessarily to providing bridges in the City, but will help to provide bridges where they are most needed for London as a whole.

The Corporation have always been public spirited ; the good work they have done has been for the benefit of London as a whole, and I hope that will always be the case, and that in this way they will maintain the reputation which the Corporation has always held.

Mr. SYDNEY KITSON (Hon. Secretary, R.I.B.A.), in proposing the toast of " Our Guests," said : I once read, somewhere—it may have been in the columns of an evening newspaper—the words of a philosopher who said that Hospitality and Architecture were the two finest products of civilisation. If, as I believe to be the case, the author of these words is present as one of our guests to-night, I wish to thank him publicly for the statement of what I believe to be a profound truth. If he will allow me I will use his saying as a text for the few words I have to say in proposing the toast of " Our Guests."

You will observe then, if we analyse this text in the orthodox way, firstly that the philosopher places Hospitality before Architecture in his order of precedence. If you compare in your mind's eye the size of this great hall where, by the courtesy of the Lord Mayor and the good offices of our President, we are privileged to offer hospitality to our guests to-night, with that small room at the Royal Academy where the representative output of some ten thousand British architects is annually shown—then I think you will agree that the philosopher had reason for the order in which he placed the two words.

Secondly, although he puts Hospitality before Architecture, yet you will notice—and this is the crux of the whole matter—that the philosopher couples them together by the use of the simple word " and " In the same way we architects are trying to couple together to-night " the two finest products of civilisation " by offering hospitality in so large a room to those whom we delight to honour.

Thirdly—although I admit that this point is rather more obscure—the philosopher seems to hint that a peculiar civilising glow may result from the mingling of Hospitality and Architecture. We hope that you have felt this inward glow to-night, and that this glow—if glow there be—may be permanent and that it may favourably influence your outlook on contemporary Architecture.

If I may draw a moral from the text—and morals are said to be admirable digestives—it is this : Never judge of contemporary Architecture on an empty stomach. Some architect friend of yours may tell you, modestly enough, that he thinks—although of course he hopes to do better next time—that his latest building may, perhaps, contain some message for Humanity. If you examine your friend's building in the cold light of the morning and fail to capture that message—then go and have a hearty lunch and return to your friend's building in the afternoon, when it may be that its walls will reverberate with messages for Humanity.

I wish I could mention all our guests by name to-night. To do so is impossible, since our President has—very properly—restricted me to five minutes. I must content myself by saying that they represent what is best in English life and thought and action. One exception I must make and mention the name of one of our guests—M. Pontremoli, the President of the French Society of Architects—who so well represents the life and thought and architectural culture of our neighbours and allies. Many of the lady guests are the wives and relatives of architects, and therefore know to the full the disappointments and triumphs of the most precarious and the most fascinating of all human callings. To them I offer my sympathy and my congratulations.

When I have finished speaking one of His Majesty's Judges will sum up. It depends partly on his summing up and partly on the warmth or otherwise of your own inward glow whether you, our guests—the jury—will or will not return a favourable verdict upon our efforts to-night to justify the words of the philosopher, when he said that Hospitality and Architecture were the two finest products of civilisation.

The Hon. Mr. JUSTICE SWIFT, replying for the guests, said : There are two simple English words which, if properly arranged and spoken with intention and sincerity, convey a host of meanings and are pregnant with sentiment. And, Mr. President, it is my privilege to-night to pronounce to you and those who are associated with you in offering us such kindly hospitality those two simple words : Thank you. To those of us, Mr. President, who have had the pleasure of knowing you and our charming hostess of to-night for many years, those words speak of the real affection which we feel for you individually. Those words also voice the great gratification which we, your guests, feel at being invited here to-night to share, for a few moments, some of the leisure of the members of the Royal Institute of British Architects. They also voice our feeling of admiration for the great work which has been done by you and your predecessors in office since that date which my learned friend the Recorder mentioned, but which I have now forgotten, though it was some time in the reign of William IV. We look, if not with awe, at any rate with admiration and gratification, at the great work which your Institute has done from that day until now, and is still doing. Mr. President, you in our own times—and when I say " you " I do not mean you individually, though I know you have done your part in

what has been accomplished—you and your colleagues have done marvellous things for the improvement of the environment in which we live. You have cleared away our slums—there are still some for those who come after you to clear—you have widened our streets, you have built us new towns. You have embellished our countryside. But, beyond these things, you have instilled into our minds the fact that besides the necessity of healthy surroundings for suitable life, hygiene is not incompatible with beauty, and comfort is not necessarily inartistic.

I speak to-night, by your command and to my great honour, on behalf of a great number of very distinguished guests. They represent every phase of literary, artistic, scientific, political, municipal, legal and everyday working life. I cannot pretend to imagine what each one of them would like to say to you in response to this toast. But I am convinced that I can express the gratitude of every one of them to this great Institute for the work its members have done in the past, which they will do in the future, and for the hospitality which you have offered to-night, if I say to you, " Thank you."

The following is a list of the company present :—

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Science and the Art of Architecture

An Introduction to the Study of the Causes of the Disturbance of Traditions

[AWARDED THE R.I.B.A. SILVER MEDAL, 1930.]

BY RONALD AVER DUNCAN [*A.*].

CHAPTER I.

Concerning Tradition.

"All that we are is the result of what we have thought; it is founded on our thoughts, it is made up of our thoughts."

GAUTAMA BUDDHA.
THE DHAMMAPADA.

ARCHÆOLOGY has proved that architecture and the decorative and plastic arts provide a sure indication of the qualitative as well as the quantitative values of a civilisation. Even in the absence of any other evidences, the history of the rise and decline of a culture may be clearly traced in the remaining fragments of buildings. The trained observer is able not merely to reconstruct the social organization and economic system, but to deduce beliefs and compute moral worth from architecture and its attendant arts. As an activity of prime import, architecture responds with great sensitiveness to all those deep-rooted social impulses which are but half consciously appreciated at the time by the individual. This significant aspect of the art has not failed to impress itself upon the philosopher, and no philosophy is complete that leaves out of account this vital activity, seeking not only to comprehend the material needs that call for constructive effort, but the mental processes that determine its character. It is, however, a common failing of historical studies to be concerned with effects to the exclusion of causes. Effects are as the display of symptoms to the physician—phenomena from which to deduce a law of causes.

We are confronted to-day with the spectacle of changes in architectural expression which are of such a nature as to command more than passing attention. We may be sure that they do not represent the normal fluctuations of fashion and fancy, for they are too comprehensive and of at least a century's duration. They bear all the character of responses to fundamental changes in impulse. That these changes are not more generally appreciated is due to that attitude of mind which considers as inevitable the continuity of any given social organization. The evolution of a tradition is so slow a process that it assumes for those immersed in immediate activities an appearance of permanency which is belied by history.

The study of the origins of civilisations shows that out of intuitive impulses and half-formed ideas is evolved the germ of a social system; slowly it finds expression in activities. It grows from simplicity to complexity. Any defects inherent in its early concepts* are carried forward and inevitably magnified as the more complex structure is built up. So long, however, as the concepts are capable of controlling and vitalising activities they are not readily revised or abandoned, but when a social structure shows signs of losing its unity it is a sure indication that the concepts upon which it was founded are no longer sufficiently widely held as to dictate the character of development. Hesitancy and the tendency to call in question the virtue of fundamental principles are symptoms of the decline of a tradition. In the full flower of a culture the desire to analyse and cast about for fresh principles is rarely found. The automatic and natural response of the activities neither calls for nor encourages deviations. Under such conditions knowledge is sought not for the purpose of evolving new concepts, but rather to extend or establish more firmly those that exist.

The search for knowledge is entered upon for two widely differing reasons; the one has as its objective the establishment of less erroneous concepts, the other is sought in order to form a store of one kind only, thereby striving to render effective some particular activity which is to be progressive only within the limits of an accepted principle. The former type of knowledge may prove destructive of the entire fabric of the second, attacking as it does the principles upon which the latter was founded. Knowledge is always purely relative and there cannot be an absolute fixation of principles; there is a periodic process of establishing, destroying and rebuilding which entails the recasting of the activities in a new mould. It is for this reason that human progress is relatively slow. Prime concepts are not changed with frequency, for the quality of mind capable of perceiving defects and attempting the establishment of alternatives is an extremely rare possession. The majority of the members of a community act intuitively, accepting concepts from the traditions of their race, and are content to acquire a workaday knowledge to serve the activities in which they are immersed. Thus it is that knowledge which compels the changing of concepts is often definitely opposed, for its intrusion may necessitate the laborious process of rebuilding the entire structure of knowledge acquired by practical experience.

In the field of artistic creation there is a dual reason

* Concept.—A general notion; the image or idea formed in the mind; a mere fancy (Shakespeare). Schopenhauer in his philosophy uses the term concept in reference to reasoned ideas only.

for opposition to any disturbance of accepted principles, for not only may changes prove to be destructive of the craft tradition and working knowledge, but are apt by mental confusion to paralyse temporarily the intuitive faculty.

During any period when concepts are in a state of revision, strong individualism is apparent. This is inevitable and due to the absence of any general acceptance of principles. There can be no fixed symbolism or often not even a common ground for emotional expression, for the unifying power of a common objective is lost. In these periods the attitude of the artist of the highest type is to let intuition alone direct him and thus to avoid the reasoning out of new issues. The generality of artists who belong to the category of craftsmen continue to work in the traditional manner with increasing loss of significance and power until their work reaches a stage of complete devitalisation.

The first establishment of new concepts has always been by the minds of the few and by the few comprehended, but, with the lapse of time, if the natural instincts of the many are not violated by such concepts, they become embodied in the culture of a people through a process of apprehension rather than comprehension.

We cannot, therefore, expect to find any immediate reflection of such changes of concepts in the arts any more than they can be reflected in the social organisation. Literature and poetry may give expression to the new ideas in isolated instances without necessarily showing any novelty of form ; painting and sculpture can, by reason of their possible detachment from any material considerations, make individual experiments, but in truth all the arts must await the extensive penetration and a fairly general acceptance before they can give coherent expression to new ideas. Architecture is the least amenable of the arts to individualist experiments ; the complexity of its execution, the intimate relationship it bears to all the factors of communal existence render it ill adapted as an art to express personal emotions. Moreover, to excite an interest real and general it must have a symbolism immediately comprehensible by the great majority of spectators. It is essentially a communal art and is, therefore, subjected by necessity to a continuity of tradition from which it is slow to deviate. The appearance of radical changes is a sure indicator of fundamental shiftings of basic concepts, as no single factor in social life or economy is of itself sufficiently powerful to alter the line of development of an architecture.

The history of European architecture gives us the picture of two fundamental changes in building tradition, both intimately connected with changes in concepts of which they are in truth the expression—the collapse of classical culture and the transition to the mediæval, and the shifting of the mediæval to the Renaissance.

Among ancient peoples drastic changes in architectural style usually originated from conquest and invasion. They indicate the imposition of new concepts with their counterparts in expression in religion, symbolism and ritual, as well as social organisation, as mere differences in craftsmanship alone can have no far-reaching effect. In cases where the conquerors have themselves been lacking in that culture which is the product of settled conditions, the result has been a period of pause or even chaos, but ultimately the imported concepts bring about a difference in expression, whatever borrowings the invaders make from the superior technical skill of the invaded.

The study of the arts and more especially of architecture has been too obsessed by the obvious mechanism of craft development to seek out the determining principles which underlie " style," that " will to form " which predestines the nature of form itself. For example, to imagine that the happy chance in the possession of such a building material as marble contributed anything but a facility to the Greeks, and that logic, order and subtlety, qualities of their mind, could only find expression under favourable geographical and geological conditions is to misinterpret the significance of æsthetic effort. A logical use of material is the outcome of a logical mind. The Greek spirit is discernible whatever material they employed. The domination of their culture in the Mediterranean was a domination of superior quality of outlook, not only of craft skill.

To-day history and such sciences as archæology and psychology render it possible to guess at root causes and to achieve a measure of comprehension of a culture becoming as well as become.

Gibbon, in his history of *The Decline and Fall of the Roman Empire*, rightly appreciated the disrupting power of new concepts and apportioned much blame to the penetration of Christianity. He does not, however, give credit to the superior vitalising capacity of Christian beliefs, not as expressed in a fully developed and working social system, but in the realm of ideas. Reviewing the destruction of a complex social organisation and all its material prosperity, he merely deplores the inevitable, for had the principles which served to build up and control Roman social organisation been capable of indefinite expansion so as to direct all future developments, his account would never have been written.

It is clearly evident that so long as concepts maintain sufficient vital force to enable them to energise and qualify activities, there is a general development on established or traditional lines. If, however, concepts are revised the activities will ultimately answer to the change as a needle to a magnet.

We can observe in Roman Architecture the drift to a gross materialism from the puritan spirit of the early days of the Republic. The revivifying concepts came too late to be grafted on to the existing organism to

which they were opposed in principle, but they survived the destruction of the Western Empire to serve as a basis for the social structure of the Middle Ages. The Eastern Empire, which comprised a population long imbued with beliefs analogous to Christianity and not subjected to invasion by successive waves of migrating peoples, was more easily welded together culturally to form the Byzantine Empire. Here the material experience of the classical world was not lost but transformed in its expression. The Greek not wholly submerged by the Roman conquest arises to direct revitalised æsthetic activities.

The second disruption of cultural tradition in Europe at the Renaissance presents factors which do not enter into the first. The question of nationality is not so intimately interwoven with arts and culture, for although the Western Church had failed of its purpose to establish the Holy Roman Empire out of diverse races and nations in a practical sense, it was singularly successful in the cultural. For if local idiosyncrasies and details are overlooked, it is possible to perceive Western Europe as one in æsthetic expression. Uniformity of concept, the result of the teaching of the Church, was mainly responsible.

The gradual loss of vitality, and consequently of growth, within the Church itself resulted in a rationalism of belief which was lacking in elasticity. Under such conditions, the only possible means of maintaining an undeviating continuity in the face of new concepts of vital import was to attempt exclusion and seclusion. This state cannot be maintained indefinitely whatever the circumstances, but it certainly cannot be achieved by an ecclesiastical body lacking absolute power. Although the unity of the Church was destroyed, the cultural unity of Europe remained, with the racial and national characteristics entirely subordinated to the main characteristic of European. The reason that national characteristics did not become unduly dominant at the Renaissance was in part due to the exploitation of the invention of printing, which, in spite of the difficulties presented by differences of language, enabled knowledge to be disseminated rapidly and provided the cultural bond.

The most vital factor of the Renaissance was the assertion of the right of the individual to acquire knowledge for himself and freedom to choose the source.

That classical learning should have obsessed the schools is due to the natural tendency to ransack existing sources before beginning original experiments from which to draw entirely new conclusions. The turning away from the blind alley in which mediæval philosophy and the arts and sciences had lost themselves, resulted automatically in renewed contact with the forgotten culture of the classical world. There was stock enough here on which to draw for centuries. The Renaissance, having no basis for scientific analysis except inexact historical knowledge, re-explored much ground unnecessarily and accepted as valid much that had already once proved defective.

Although the classical source of knowledge coloured all the activities of life from the fifteenth to the eighteenth centuries it was but a colouring. It is a curious fact that as more and more exact information was available about the classical world, and it became increasingly possible to apply this knowledge to a re-expression of a past manner of living, so the knowledge declined as a source of inspiration. This is clearly mirrored in architecture where, for a time, the free use of classical motifs, merely as so much design material, resulted in great vitality ; but ingenuity in the use of a given series of forms cannot indefinitely support development, and the art fell back upon a scholastic formalism lacking in inspiration and significance.

The growth of autocracy as a substitute for the feudal system is significant as it provided a form of centralisation which acted as a unifying factor in national culture. Such forms of government have always been provocative of display, which is in some degree essential to their maintenance. Autocracy, therefore, proved not only a lavish patron of the arts in itself, but the system set up a rivalry in display amongst the members of the court and imitation *ad absurdum* among the lesser gentry. This rivalry was not contained within the boundaries of each individual nation, but was the direct cause of borrowing ideas from extra national sources.

The democracies of the period are represented by the Free Towns of the Low Countries and Germany and, in a measure, England. Their contribution in the field of architecture was primarily the dissemination of ideas of comfort and convenience as opposed to pomp and display, which were widely disseminated by trade contacts. These are in part responsible for the maintenance of an international culture in Europe, in spite of divisions of race and language which was the legacy of the Middle Ages.

The Renaissance, obsessed as it was with the exploration of the treasure trove of Classical knowledge and the adaptation of a ready-made culture, was slow to make use of its freedom to seek knowledge outside this field. Classical learning provided no precedent for the research method, which is the examination of phenomenon by experiment and the correlation of facts from which to deduce natural laws. Nevertheless the method originated in the early days of the Renaissance when it aroused strenuous opposition, but an opposition which was not directed against all those changes of philosophy and form imposed by the adoption of classical ideas. The true reason is not far to seek, for the research method which we now call the scientific, resulted in an attack on concepts necessitating a fundamental revision of beliefs and so it was strenuously opposed alike from ignorance, prejudice and vested interest. Although the

seventeenth century witnessed great advances in scientific thought, little or no practical application was possible, for the data was too scattered and many vital factors remained unexplored or unsuspected. Material existence was little affected, but a far-reaching disturbance of philosophy and religious dogmas resulted from the gradual penetration of the new concepts.

CHAPTER II.

Pure Science and Philosophy.

" We are in the process of discovering a whole new world, nothing less."

Sir Oliver Lodge.
Science and Human Progress.

In *Revolutions of Civilisation* Sir Flinders Petrie says : " The meaning of life has in all ages been the goal of human thought. The search for the cause and effect of the changes that man has undergone has laid the foundations of his religion and philosophy." He uses his wealth of archæological knowledge to prove the truth of this axiom by presenting its operation over a period of ten thousand years and confronts us with its expression in the arts. But in the whole history of mankind there has been no greater quickening of thought than that which has resulted from the application of the scientific method of enquiry established at the Renaissance. It is therefore legitimate now to concern ourselves simply with the formation of this attitude of mind, leaving the study of effects for later consideration.

The term " science " is now very loosely applied, but it is generally used to denote the physical and natural sciences. It is also, with the addition of a qualifying word, used in connection with studies of a different nature ; thus we speak of political, moral or economic science and we further refer to many subjects as being examined in a scientific spirit. In its broad sense the term " science " may be used to denote systematised knowledge of any kind and the science will be intermediate between the vague and loose knowledge of the " plain " man on the one hand and philosophy as the *scientia scientiarum* or comprehensive system of knowledge which seeks to embrace the results of the special sciences in a single world view on the other. The meaning of " science " has become the application of a particular method which is the product of an attitude of mind.

That science should spill over into philosophy is inevitable, for the establishment and co-ordination of facts by the individual will always tempt him to place his whole concept in line with them. Thus it is common to find physicists and mathematicians especially engaged in philosophic speculation, from which science cannot be entirely divorced.

The first society for experimental research—The Accademia dei Lincei—was founded in Rome in 1608. Here were made the first of those co-operative efforts which have led to our modern scientific method. The seventeenth century contributed some of the greatest original thinkers and experimentalists in the whole history of human thought and effort. These men meant comparatively little to the world at large in their own time, but the nature and quality of their speculations as well as their method was provocative of consequences, ever widening in influence. A short list of names will conjure up to the mind what " The century of Genius " has given to the world in the matter of science. Bacon, Galileo, Harvey, Kepler, Newton, Descartes, Pascal, Huygens, Spinoza and Leibnitz, are among the first prophets of a new era which is still in the process of fulfilment. All branches of mathematics and physics were the best served by the period, and the Newtonian theories, for example, remained largely undisturbed until well on in the eighteenth century. The period led up to the establishment of the general belief " That the world is a succession of instantaneous configurations of matter," and scientific thought began to be satisfied by a theory of completely materialistic mechanism.

The eighteenth century carried forward on the basis of the scientific ideas established in the seventeenth ; and little that was fundamentally new was propounded, although much development of detail took place, but we get the introduction to modern chemistry in Lavoisier, and to electricity in Galvani and Volta. The nineteenth century witnessed the continued and increasingly rapid advance in all branches of science due to co-ordination, but the characteristic and most marked element of progress is in the field of technology, which was entirely without precedent. Chemistry as a practical science is implemented by the atomic theory of Dalton, and the study of electro-magnetic phenomena by Ampère and Faraday, culminated in the theories of Clerk Maxwell.

Apart from the more obvious practical results of scientific researches of the century there is nothing that has attracted the attention of " the man in the street " so much as the theories of evolution mainly associated with Darwin. Towards the close of the eighteenth century the fixity of species began to be questioned. Transformism was an early attempt to explain the effort of the living organism to adapt itself to the conditions in which it lives. The naturalist Lamarck propounded the theory that the individual was responsive to its circumstances and consequently developed this or that characteristic of structure, and that individual adaptations were transmitted to the offspring. Proceeding with the same subject of enquiry Darwin published in 1859 *The Origin of Species by Means of Natural Selection*, followed up by his book *The Descent of Man*, which brought the study into the field of interest of a wide public. The whole subject became entangled

with religious and moral ideas, producing the most heated controversy that science had experienced since the earliest days of its conflicts with ecclesiastical dogma.

Closely associated with these studies is the general advance of physiology. Medicine is finally released from the bonds of superstition, making great progress through the work of such men as Pasteur, Lister and Koch.

The close of the century was unproductive, but the twentieth century has been ushered in with a display of great activity in the field of mathematics and physics. Physics, " shortly before the Relativist Landslide had begun to make itself felt, had been subjected to two shocks of the greatest magnitude. The disturbance has not yet settled down." Matter which has stood for centuries as the most fundamental thing in the universe, as viewed by science was swept aside, leaving the electron as the basis of the objective world ; then came the establishment of the quantum theory which also originated from researches into the structure of the atom and electro-magnetic phenomena. These theories necessitate a complete revision of the materialistic concepts of the preceding scientific thought. It is clear that the relatively simple faith that science displayed in the ultimate possibility of the complete explanation of phenomena has had to be abandoned for a complexity in which the fundamental limitations of the human make-up must be counted as factors, since these form an integral part of many problems. The inevitable result will be to increase the importance of psychology and philosophy.

In the narrow sense the term " Philosophy " is identical with metaphysics, but in its wider sense it embraces metaphysics, logic, ethics and psychology. These last three may perhaps reasonably claim to be special sciences amenable to the research method but they cannot rest upon that basis solely, dealing as they must with the meaning of meanings.

It was Aristotle himself who first called metaphysics philosophy to which all the special sciences must bow, but though it is still the highest of all sciences, it cannot now swallow up or supersede them but rather takes its place beside them in the general classification of knowledge. It may be defined as concerned not with any particular aspect of what exists taken in abstraction from other aspects, but with the ultimate nature and principles of the *real* to the limit of contemporary understanding.

The conception of philosophy has undergone many modifications since Aristotle's day, although the aim has been the same at all times—namely the attainment of the most fundamental knowledge, but naturally the conception of that knowledge, the way in which, and the extent to which it can be attained, has varied alike with internal conditions and cultural bias. In mediæval times philosophy was entirely subordinated to theology, and the schoolmen, in spite of their deference to Aristotle's doctrines, were separated from him by the impassable barrier of ecclesiastical dogma. The release from this restriction of thought enabled philosophy rapidly to regain the position occupied by the Greek philosophers ; but this position was not long tenable, for the relative simplicity of Greek conditions had given place to a complexity which was largely brought about by studies in the special sciences and their contribution to the knowledge of natural law. The enormous mass of facts to be digested by one individual was a very different task from that which confronted Aristotle, who summed up in himself the whole scientific knowledge of his age. The continued and rapid growth of this complexity is the chief obstacle in the way of presenting a complete and homogeneous philosophy to-day. Moreover, the intervening period of mediæval mysticism cannot be dismissed out of hand, reinforced as it is by mysticism drawn from other sources.

The scientists of the Middle Renaissance were also the principal philosophers of this age, for instance, Descartes, Leibnitz, Kant and Hegel, to mention only a few. The last named, although hardly a specialist in science, derived his facts from a wide range of positive knowledge and his works exercised a considerable influence on historical and humanist studies. Nevertheless, with Hegel, or rather with the subsequent reaction against the type of philosophy which he represents, there begins a profound change in the relationship between philosophy and science. Hegel's was the last great system which pretended to an absolutism of philosophy. Lotze, in his preface to *Logic*, says " it is obvious that I can propose nothing more than to set forth my personal convictions in such a form as will enable the reader to judge not only to what degree they are consistent with themselves but also how far they are capable of serving to unite the isolated provinces of our certain knowledge, in spite of the great gaps that lie between them, into a coherent view of the world bearing the character of completeness." This change of front was the inevitable result of the enormous extension and continually increasing specialisation of science, which have made it quite impossible for one man to think of comprehending in Hegelian fashion in one complete framework, the masses of material that are now available.

The difficulties presented have caused philosophy to take a less dominant position in the realm of knowledge. There are some to-day who would fain see metaphysics driven out once and for all and supplanted by the special sciences. It is clear that this cannot take place, as the impulse, deeply rooted as it is in the human mind, would reveal itself sooner or later in other directions. On the other hand, the doctrines of religions make a claim to dispense with metaphysical speculation since

they see in the practical certainties of religious faith the only true resting-place of man's belief. But even so, a difficulty is presented by the fact that the acceptance of this claim does not secure permanency of principles for religious belief is subject to revision by the process of revelation.

The modern position is obscured and lacking in any bond of unity between the special sciences, philosophy and religion, the situation being dominated largely by the purely material repercussions of scientific research.

Aesthetics as a study follow much the same course as theology, which is also that in some degree pursued by philosophy. There is a gradual tendency to separatism. All three fail to adjust themselves or to be adjusted by scientific thought in such a manner as to establish firmly a unity of concepts. The widening of the gulfs has been continuous although it has been gradual. Francis Bacon in the early part of the seventeenth century had comparatively little difficulty in reconciling his scientific views with religion and æsthetics, incorporating them in a philosophy which displays a unity of concepts.* By the close of the century the possibility of such a unity had completely vanished. This position has remained more or less unaltered except to increase the difficulties. The uncompromising character of completeness of scientific thought of the later half of the seventeenth century was as much responsible as the inelasticity of philosophy and theology. Scientific materialism had comparatively little difficulty in substituting ethics for religious belief and replacing metaphysics by a clear statement of natural law, but it was confronted with a more difficult problem when called upon to account for æsthetic impulses. As a whole the subject was ignored or dealt with in such a manner that it obscured rather than elucidated causes. Classicism which lent itself to analysis and the establishment of a fixed code was readily embraced, but Gothic, non-European and primitive arts were brushed aside or totally ignored. The philosophy of Kant foreshadows the trend of æsthetic thought of the nineteenth century, which witnessed the revolt from classicism culminating in the Romantic movement. This revolt was due not only to the failure of the scientific method to incorporate a logical and complete æsthetic theory which could direct the arts, but was also the expression of a disbelief in the possibility of so doing upon the existing lines of "scientific concreteness." Schopenhauer, who was no little influenced by Goethe, maintained "that the 'concept' is of itself unfruitful in art which is a matter of feeling rather than intellection attaining its highest and happiest effects intuitively." Herein is expressed the flight from that scientific materialism which affirmed that instinct and intellect are the originators and controllers of all activities. Schopenhauer made extensive researches into Eastern art and mysticism and his logic compelled him to discard a classicism which failed to include them in its scheme of æsthetics. Working upon similar data and premises Croce affirms that "knowledge is of two forms; it is either intuitive knowledge or logical knowledge; knowledge obtained through the imagination or knowledge obtained through the intellect; knowledge of the individual or knowledge of the universal." This involves a separation of the controlling influences of activities and even of the activities themselves, leaving to the individual his predilection or choice as to whether to be guided by intuition or intellect. Were it otherwise he would be forced to admit the ultimate superior directing power of the one or the other. The confusion in the arts set up by the Romantic movement appears likely to continue in the absence of any philosophic liaison between the special sciences on the one hand and the arts on the other, for the philosophic basis of the classical tradition of the Renaissance has been destroyed. There is nevertheless some seeking after a union of "creative faith and critical intelligence," some acknowledgment of the need to establish a relationship of faculties such as Professor Babbitt attempts in his critical philosophy.

* The general attitude to art during the seventeenth century is reflected by the terms used in the Authorised Version of the Scriptures. Art—artful—cunning as "cunning workmen." (A.S. cunan=knowledge).

CHAPTER III.

Applied Science and Invention.

"If the end be well all is well."
Gesta Romanorum.

The spectacular character of the achievements in the sphere of applied science during the last hundred years has obscured, by a direct appeal to the imagination, the proper relationship to the scientific thought of the seventeenth and eighteenth centuries. This period, by directing attention to the possibility of employing natural forces, not only founded the basis of modern applied science but also, indirectly, of mechanical invention. The chief objective of this activity has been economic, but it has also acted as an outlet for creative impulse and has consequently tapped off much energy which otherwise would have displayed itself in the minor arts, for these in the past have been its natural vehicle. Although many modern inventions of prime importance owe their origin to scientific research, many more are merely examples of ingenuity and belong rather to the realm of an experimental craftsmanship than to science.

This restless experimental impulse is peculiarly strong in the Nordic peoples and is found expressed in their earliest arts and crafts. It has paved the way for the mechanical developments of to-day and has also rendered the assimilation of novelties comparatively easy for the masses.

The progress in tool and machine making witnessed

in Europe during the last hundred years is unparalleled in the history of mankind, and, even if it were unaccompanied by any revolution in thought, would deserve the most careful consideration. In the course of time this progress cannot fail to result in fundamental changes in the manner of living and the expressive arts. We are apt to accept our mechanical innovations so much as a matter of course that we fail to appreciate their effect upon us and the growing momentum of the changes they bring. Some of them date back to the early Renaissance ; of these, first in time and certainly in importance is the invention of printing. The Chinese long before had used wood blocks, but it is the movable type first employed in Europe in the autumn of 1454 that has provided us with unprecedented means of disseminating and storing knowledge. From its conception the invention was rapidly developed and exploited, and before the close of the fifteenth century fifty German towns had established presses. Introduced into Italy in 1465, over one hundred and fifty firms of printers were at work in Venice alone by 1520. The process of printing since then has continuously developed with increasing facility and speed. The chief landmarks of its progress are the substitution of metal type for wood, machine movements, and steam power for clumsy hand presses. Stereotyping and electrotyping, the application of photography and process work are the more recent additions to its accomplishments. A world without printing would be now indeed strange to us, but we scarcely stop to think of the potency of this invention. The effect upon the arts has been vital, but to trace all the ramifications of its influence, both from the point of view of theory and practice, is subject matter for a volume. Printing played an important part in establishing the art of the Renaissance, and books provided in part a substitute for the mediæval guild system of training. The illustrated book was at once a source of inspiration to the craftsman and a disturber of his traditions ; to-day economic photographic illustration is largely responsible for our eclecticism. Printing has made possible the wide dissemination of individual or clique ideas which in the absence of definite principles is unfavourable to any sort of steady development in architecture as well as in the plastic and decorative arts. On the other hand the invention has been wholly beneficial to the advance of scientific knowledge and without its aid no comparable progress could have taken place. It is a recording medium, an extension into time of the faculties of individuals giving permanence to thought.

Printing is in a broad sense the first of the series of inventions of communication, but no great step forward in this direction is to be observed until the application of steam power to machines. Within the last century were invented in rapid sequence the steamship, and the locomotive, and the internal combustion engine applied to road transport. Once agreed that trade expansion is desirable, no effort that contributes to facility in transport can be considered as wasted ; equal in importance are developments in communication, the penny post, telegraph, telephone and wireless. The progressive expansion of transport and communications, apart from its partly anticipated economic consequences, has had unexpected results upon traditional arts and crafts. This tradition is often based on, and certainly supported by the extreme conservativism of what are termed the peasant arts and crafts in which it has freedom only within the circumscribed limits of its formulæ ; but this very concentration for long periods render it capable of achievements denied to a more liberal, but indeterminate attitude. Lack of communications act as a sheltering wall to native arts and crafts, but once wider contacts are established they rapidly decline. Any artificial stimulation by romantically-minded folk, or even the earnest endeavour of those who desire to preserve much that appears good and valid, is doomed to failure, for not only are economic conditions changed, but the very effort involves the substitution of conscious endeavour for spontaneous action. Nothing provides such a conclusive proof of the effects upon tradition of a wider intercourse as the rapid disappearance of peasant costume in Europe. Most people will agree that lack of communications fosters and encourages the growth of local differences by leaving small communities at the mercy of purely local conditions of labour and materials and to the limitation of a circumscribed range of thought. But the converse is equally true, and easy communications have a tendency to unification not only nationally but internationally. The standard set up by the larger centres of population filter through the country and economic considerations enforce conformity.

One of the chief effects upon architecture is that the controlling influence of local geological formations has largely disappeared, for the economic position is such that the mere proximity of a natural building material will by no means compensate for easy quantitive production of some other material even if it be at a distance.

The railway was limited in its sphere of influence, but the motor-car has accomplished almost complete penetration, and what the railway achieved slowly the motor-car will complete rapidly and doubtless the aeroplane in due course will bring about similar results in non-European countries. The prospect distresses many, but it is a fact that has to be faced.

Any survey of applied science which was strictly confined to the period of the last hundred years would reasonably commence with the application of " power " to machinery. First steam, then gas, oil and electricity

provided substitutes for hand labour. The revolutionary change is hardly yet appreciated. Early in the century the correlation of scientific research and its many and various applications began to take effect upon commercial and industrial life; this delayed reaction was due in the main to the necessity to await the discovery of missing elements in metallurgical knowledge which alone could provide the means to improve the manufacture and manipulation of metals. It was primarily the requirements of machines that has led to the metal age. For example, the application of steel as a structural material for building was a bye-product of other demands and was scarcely thought of fifty years ago.

The factory method of production, which has always existed in some form in a developed civilisation, has been so greatly extended by power-driven machinery that it now presents novel social features. The economic effect upon the humbler handicrafts has been to drive them almost out of existence. The character as well as the misapplication of this new means to increased production aroused the condemnation of such men as Ruskin and Morris, leaders of a school of thought which was opposed to the whole line of development. Both process and products were the subject of their scorn. They perceived the fundamental significance of the changes and sought to stem the tide by a revival of handicraft; this met with some measure of success, but the wider social application of their ideals has been entirely submerged by the economic conditions set up by the power-driven machine tool. It is logical to anticipate a great extension in the use of machines, for every effort will be made to increase production by this means and to remove the necessity for human intervention other than starting and stopping. Machine production has to-day almost entirely superseded hand workmanship, except for luxuries or works of art, and it is now rapidly extending to such complex operations as building in which machines are already employed in digging, mixing, hoisting and the like. This element of factory production, and the consequent changes in design, are of increasing importance to architecture, as building tends more and more to become a matter of the assembly of completely manufactured parts over which the building designer has no control other than selection and arrangement. In view of the changes in method it is remarkable that the effect on appearance has not been much greater than it is, and that design for machine production has been content to be merely imitative of hand workmanship. One fact emerges clearly—that machine-made articles require some measure of standardisation and mass production, and designs must be modified to meet these requirements.

The absence of deliberate design for the new processes is remarkable, but such a condition of affairs will not exist indefinitely; it is no argument that the skill of the engineer makes it possible to adapt machines to accomplish almost any desired operation, however illogical or uneconomic. Historically, the influence of tools upon the crafts has always been of the greatest importance, and changes in the type of tools employed has always produced far-reaching changes in design; it is therefore not unreasonable to anticipate the same results in the future. Such changes as are now occurring are too ephemeral and conditions too unstable to admit of crystallisation into any definite character. In spite of the complex state of our civilisation, we are, as it were, dealing with the crude beginnings of a new era in craftsmanship, and there is as yet little sign of unity between design, method and material.

Whatever may be the new social problems created by an extension of the factory system, standardisation and mass production, it is safe to predict that there can be no reversion to handicraft methods, for the demands of an increasing population and the even more rapidly increasing demand for a higher standard of life can be met only by a continual augmentation of means and the elimination of hand labour. One of the chief objections raised against machine production is that it tends to destroy interest in work by removing from the individual workman any power to shape the final form of the product, and that to design has already become the sole prerogative of the highly-trained specialists who take no other part in production. It is possible to overstress the social importance of this, for at no time in history has more than a very small percentage of any community been engaged in activities entailing the employment of any creative faculty. It is, however, fairly obvious that more highly educated individuals cannot be wholly satisfied by mechanical repetitive employment, without compensation in some form such as increased leisure, with the means and method of employing that leisure.

The prevailing faith in mechanical appliances has led to an invasion of the house by the machine, and this is reflected in the demand for so-called labour-saving devices, but as these are confined to fitments they do not greatly affect appearance. There is, however, a growing desire to avoid drudgery which extends beyond the employment of machines and enters the province of form and decoration, or seeks to eliminate such essentially traditional features as the fireplace and moulded woodwork. It is by no means solely in the matter of machines that applied science is revolutionising the manner of living; in the guise of sanitation and preventative medicine it is determining values little considered in the past, such as light, air, cleanliness and drainage. The belief in the essential importance of these things is powerful enough to modify traditional building

requirements, and to create a demand for a form of town planning which will permit the whole community to enjoy the amenities they afford quite apart from their application to the internal economy of buildings.

The discoveries resulting from the researches chiefly concerned with medicine, such as bacteriology and physiology, are now being applied to agriculture. These bid fair, when coupled with the innovation of power-driven machines and transport, completely to revolutionise the conservative traditional character of this basic industry. The importance of these facts cannot be over-rated, for agriculture with a few exceptions is the most vital industry to a nation, employing and determining the character of the lives of a large proportion of its population. Changes of urban life are often of a transitory nature, but that which has power to alter also the tenor of rural life will achieve a lasting effect.

The main issues of applied science have no national boundaries. They tend by their economic significance to compel conformity and to be superimposed upon national character throughout the world. In so far as they are mainly European in origin, they appear to be spreading European culture, but there are now signs of a return flow from non-European countries. The imposition of this super-national character can be judged by the fact that all means of transport are taking on an international appearance: factories must be arranged and equipped in accordance with the latest industrial practice without regard to local tradition: specialised structures, such as hospitals, tend to a world-wide uniformity. With the gradual establishment of economic equality in production it would appear that ultimately, apart from considerations which must be paid to the individuality of a site, the sole factor which will always compel a definite variation in architectural form is that of climate, apart of course from fancy or desire.

CHAPTER IV.

Architecture the Social Art.

"The Fine Arts are always an expression of the historical antecedents, the intellectual, moral and material conditions, and religious beliefs of the peoples and epochs to which they belong."

Charles H. Moore.

Architecture in its peculiar aspect of "the social art" is subjected not only to the full force of the changes wrought by the developments of Philosophy, Science and Technology, but also indirectly through the repercussion of their effects upon the life and habits of communities generally. It is in a very special sense a reliable indicator of conditions, being itself determined by them to a much greater degree than either the arts of sculpture or painting: these may reflect current thought and reproduce its effects, but architecture is of the very substance of its age and forms one of the major components of its expression. There have been many attempts to define and limit the art, but, in the final analysis of a civilisation, all structures which indicate that purpose has been qualified by a regard for effect must be included in the category of architecture. It is certain that in the future the assessment of the quality of our civilisation, as measured by its architectural accomplishments, will be based not upon the merits of a few isolated works shorn away from their context, but upon all that mass of work which was not necessarily directed by professional designers. The architect is no longer the arbiter of elegance and fashion in the Mistress Art to the same extent that he was in the eighteenth century, and certainly does not control more than a fraction of the present total expenditure upon building enterprise. He may create temporarily a *milieu* of his own in which to work, but only in so far as he comprehends and uses the forces and means of his own time can he leave any lasting impress upon his age. Therefore what we must be concerned with is not the effects upon the special art of the architect only, but upon building as a whole. The preceding chapters have been devoted to the causes of the disturbance of social tradition generally and by implication to architecture, leaving to be dealt with here those special conditions which are the immediate concern of building.

In addition to the increased variety of natural building materials made available by modern transport, designers are faced with the problem of the proper employment of a large number of novel synthetic materials. The majority of these have been introduced for economic reasons, such as rapidity in construction and standardisation, as well as the cheapness of the material itself. No exception can be taken to a material on the grounds of its artificiality, for brick, that most ancient and universal of building materials, is artificial, but imitations and shams are objectionable in their intention, but failure, to deceive. The solution of the æsthetic problem is one that rests entirely upon the skill of the designer in rightness of choice and arrangement of the material. No æsthetic progress can be made in the use of new materials if they are capriciously compelled to take on ancient forms.

The commercial tendency is to eliminate natural products if they are not suited to factory processes, and the search is for materials readily adaptable to machine production, machine handling and rapid assembly. It is clear, and has already been noted, that an attempt will be made to bring building into line with industrial processes generally, by converting the old laborious craft methods into a business of assembly. The present system of cementing together

friable and absorbent materials which render the use of large quantities of water essential for building processes is unsuited to rapid construction, and attempts have already been made to find substitutes, more particularly so as to dispense with such internal finishings as plasters and cements.

Of modern materials, none has had a more potent influence upon building than steel. Wood, brick or stone have been the structural materials in the past, each one a dictator of architectural form. What forms will be the natural expression of steel and its offspring, reinforced concrete? The development of characteristic form has gone little further at present than to reduce stone and brick walls to mere skins, preserving the cast as it were of their old shapes. But the use of steel has increased the span of openings, augmented scale, reduced supports to isolated points small in area, and created sense-alarming cantilevers. In the plan it has brought about the substitution of rectangular units for the elaborate shapings of the Roman form re-introduced at the Renaissance.

It is becoming apparent also that both steel and reinforced concrete permit of a certain flexibility in the internal arrangement of buildings, for screens may be employed as a substitute for structural walling.

Inevitably changes in process and material have affected adversely the traditional type of building craftsmen, but the beginning of this degeneration dates back to the days of the coming of the architect in his capacity of super-designer. The handicraftsman's skill bears a definite relationship to his freedom to design; the gradual assumption by the architect of the sole right to perform this function has been one of the chief causes of the withdrawal of the more highly skilled craftsmen from the building trades to become themselves individualist sculptors, painters, carvers and modellers. The process began with the Renaissance and has now reached a stage in which few building craftsmen produce unaided any design which displays artistic merit.

Many of the striking changes in recent building design are due to special factors taken in combination: thus the "Skyscraper" owes its existence not only to the use of steel as a structural material, but also to the invention of the electric lift, and again the continually increasing proportion of void to solid in wall surfaces is due not only to improvements in glass making, but the use of steel for window frames and the introduction of central heating. The interplay of similar factors is bringing into being the multiple building which houses within itself a number of buildings; thus a "Skyscraper" may be composed of a hotel, a theatre and a church, as well as shops and offices. Such a complex structure cannot disclose by its appearance the special nature of its component parts; traditional reference and the association of ideas must be abandoned for some expression which enhances its structural form alone.

A new dictation of form arises from the purely scientific analysis of requirements.

For example, it is now possible to determine acoustically satisfactory internal shapes for all buildings used as auditoria. Similarly a series of "reasonable shapes" is likely to be established for many structures requiring special qualities.

Associated with the economic necessity for increased speed of construction comes a factor comparatively new to the Western world—namely, the fact that permanency of construction, in many types of building, is no virtue, but may actually prove an obstruction to progress. A building, like its contents, frequently exceeds its life of usefulness, and the same economic laws which enforce the reconstruction of plant and machinery dictate the reconstruction of buildings. Thus the period of time that elapses between building and rebuilding grows ever shorter. Permanence as a desideratum in building, apart from certain kinds of monumental work, is largely rooted in the idea of establishing a fixed abode, the seat of the family, by which certain people are to be associated for all time with some definite locality; but this virtue appears to us to be waning in the same proportion as its economic significance. Western art has accepted this idea of permanence and generally has demanded materials to express this quality. The art of China and Japan, while making a less insistent demand for permanent materials, has suffered no loss of virtue in consequence.*

If the augmentation of knowledge by science has as yet done the arts no service, it has, through its application and technology, provided the source from which commerce and industry have drawn all the power to achieve the remarkable advance of the last hundred years. This advance has been of necessity accompanied by important changes in the ownership and the nature of the direction of business enterprises. For example, in this country the need for capital to develop new processes in commerce and industry led up through many legal enactments to the formation of limited liability companies and their final sanction by the Company Law of 1862. In the past each shareholder of a company had been considered an owner, and, as such, responsible for the conduct and management of the business in which he was financially interested. This Act finally absolved him from all responsibility, leaving him only his capital liability. The effect has been to supply business enterprise with an abundance of money wherever it could be

* By comparison with European building methods and materials those of China and Japan are, for the most part, of a much more temporary nature. Particularly is this the case in house construction, but, even in temple building, wood and lacquer predominate as materials for the superstructures.

made to turn to profit. Judged upon a purely quantity basis the results have entirely justified the system, but the " balance sheet " tends to become the sole test of virtue. This cannot very well be otherwise for the owners of the business have no interest in it other than to ask that it shall show profits.† The consumer, not the producer, becomes the individual who determines the virtue of the goods produced, and all he can do is to buy or refuse to buy. So the present day commercial method is the opposite of the process which directs the artist in his activities, as he is immediately concerned with his production and its virtue. Commerce and industry work for a demand even if it be artificially stimulated or created by advertisement. Thus the æsthetic quality of trade goods rests not upon the producer, but finally upon the culture and education of the great mass of consumers, to a much greater degree to-day than ever in the past.

The great material success of the modern industrial system has led to its application to almost every amenable activity and also by an economic reflex action it has compelled the system to be adopted for production even if contrary to precedent. It has become necessary to apply the process to building, as the old craft system tends to relegate it more or less to the realm of a luxury, like most products of hand labour. If a product is a necessity, failure to maintain an economic level having a proper ratio to all other productions and to wages and the standard of living may seriously endanger the internal peace of the State. Housing, for example, must be placed in such a category, and progress in the economy of production has become an urgent need, whatever break with traditional methods and expression it entails.

The complexity of modern civilisation has extended the field of architecture beyond the consideration of isolated buildings and related it to the organisation of towns: this restricts individualism as it calls for increased regulation and control in the endeavour to avoid chaotic conditions. It is reasonable to expect in the future the enforcement of regulations dictated by the especial needs of the age, without regard to architectural traditions.

Over and above the major factors discussed, in the matters of detail there are a thousand and one elements which introduce novel features into architectural composition, disturbing the association of ideas and causing incongruities to appear by the juxtaposition of the ancient and the modern. Long revered and accepted symbols are losing their significance, to remain with us only as meaningless decoration. Modern fixings and fittings, sanitation, lighting, heating and ventilating are contorted to pose as legacies from the past, and the special novel requirements of the present day are fitted in as best they can to the ancient formulæ of building. An architectural tradition is no longer a living thing if it cannot find a place for, and inspiration from, such a wealth of material advantages, for architecture as the social art must take cognisance of them.

In the welter of the elements of the old and new there works that æsthetic impulse which seeks for harmony and unity, an impulse which cannot tolerate for long the discord of expressing conflicting ideas, but searches out that which is the dominant, and, discarding all that it cannot adjust or modify, strives to present in art a true reflection of the age.

The first concern of the subject has been to diagnose the symptoms and disclose the causes of the disturbance of architectural traditions, for only proof and clear recognition of the fact can explain or justify much modern architecture and art and remove from it the accusation of eccentricity or unwarranted individualism. Moreover, the understanding of causes is the only foundation upon which to establish a logical system wherewith to direct future activities. No more can be done here than to suggest three possible lines of action which are open to the architect, they are—

To continue to accept traditional formulæ.

To adopt an attitude of mere opportunism.

To seek to evolve and establish fundamental principles.

Of the first it must be said that such an attitude obviously cannot be maintained indefinitely, for it tends to cause art to lose touch with life. It reflects a fear of the disruptive forces underlying the creative impulse and seeks to harness these forces within a limiting technique. The danger is that a complete severance with past tradition is liable to occur as the result of the revolution which must ultimately take place.

The second is that which recommends itself not only to the commercially-minded, but also to those who accept the doctrine that the artist is controlled by the emotions of the moment, and is at his best if he leaves out reason and argument.

But the third line of action should commend itself to the architect, for, even if he can hardly hope to evolve a complete system at the present stage of accelerated evolution and unstable conditions, he may, perchance, make some contribution to a solution of the problem of the relationship of æsthetics to science, economics and industry, and act as a check upon a purely quantitative development of our civilisation. The peculiar position of architecture in relation to art on the one hand, and to almost every social need on the other, gives the architect an exceptional opportunity to correlate activities, and point out the path to designed beauty.

† This is the tendency, but of course there are many successful " one man " businesses, with the outstanding example of Ford, who until recently had no shareholders in his business.

Upon what lines may he attempt to establish fundamental principles ? not upon the selection of abstract and purely psychological methods of analysis, for they afford insufficient liaison with the scientific method employed for all other forms of research ; but upon an analytical method tending to a completeness which shall not only include the examination of fundamental æsthetic impulses and reactions, but also the relationships of art to the life of the time. Thus out of a fuller consciousness and understanding, taking cognizance of all human faculties, the architect may contribute to aphilosophy which shall be comprehensive of both science and art.

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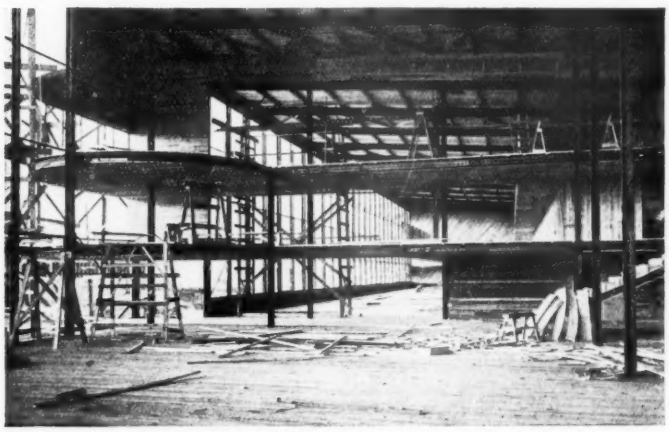
The Stockholm Exhibition 1930

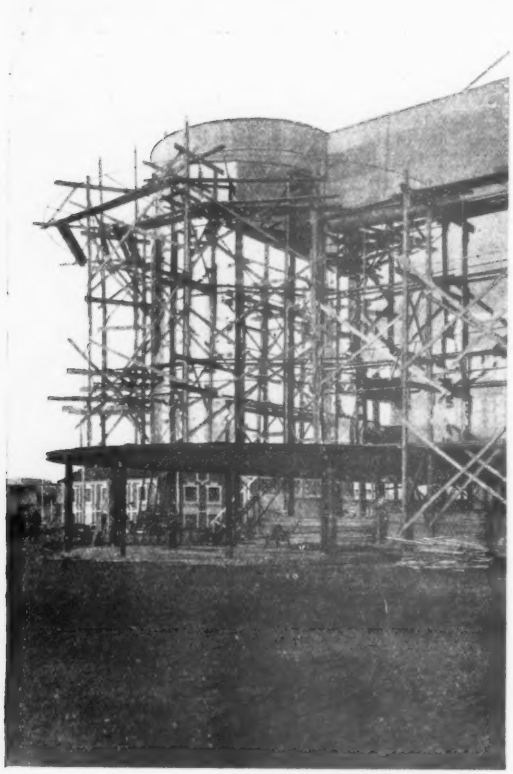
BY LL. E. WILLIAMS [*A.*].



MAIN RESTAURANT, SHOWING CONSTRUCTION

The motto of the promoters of the Swedish Arts, Crafts, and Industries Exhibition, which opens this month at Stockholm is " An Ideal Home for Everybody," and large sections will be devoted to architecture and interior decoration. In many of these exhibits Herr E. G. Asplund, the chief architect of the exhibition, has exploited to the full the modern " functional " architecture which seems to have been adopted in Sweden as a revulsion from the nationalist style which found its most complete expression in the Stockholm Stadhus.

The great restaurant is typical of this reaction, and being situated on a magnificent site in the centre of the grounds gives the keynote of the exhibition. This restaurant is about 150 feet long and 30 feet high. In

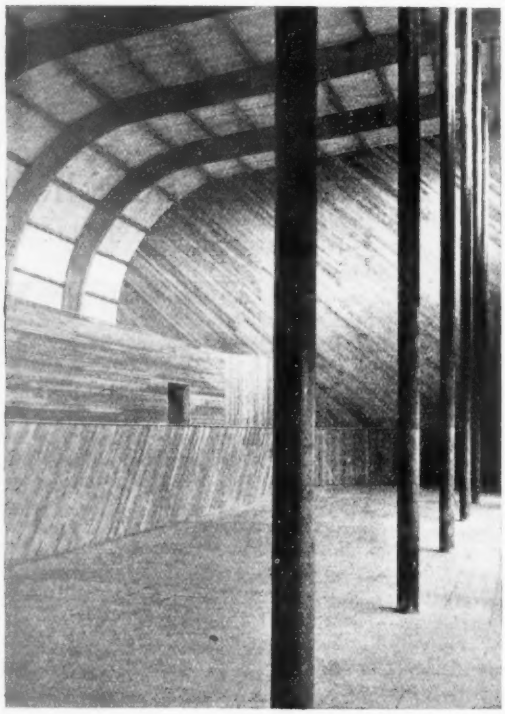


CORNER OF RESTAURANT AND DANCING-HALL

designing it Herr Asplund has endeavoured to divest himself of all tradition and to follow whither his materials and immediate needs might lead. The façade is almost entirely composed of glass, divided horizontally by the narrow thickness of the several floors so that the 2,000 guests that can be accommodated have uninterrupted views over the city and the islands. At night the dancing rotunda is a glimmering lantern of glass walls surrounded by galleries.

The interior decorations are carried out in a daring scheme of colour. The ceiling of the restaurant is bright red, the walls blue, while the pillars and beams are of silver. The schemes of lighting are of the most advanced types, one special feature at night being the transparent and illuminated railings to the balconies.

Many of the exhibition buildings seem to have been designed on the doctrines laid down by Le Corbusier. They are startling to those who have not been aware of the lengths to which this teaching has inspired the younger school of Swedish architects. Beside the stark entrance to this exhibition the most daring designs of the Gothenburg Exhibition are already old-fashioned. But it is a vigorous manifestation, if a trifle self-conscious, and a real attempt to take modern materials, steel, glass and concrete, and to fashion from them forms distinctive of their character. The influence of this exhibition in a country like Sweden where the crafts are already highly developed and take an important place in everyday life, will be interesting to follow.



INTERIOR OF ONE OF THE EXHIBITION HALLS

Reviews

GREENWICH HOSPITAL.
BY T. C. AGUTTER [*R.F.*].

ROYAL HOSPITAL, GREENWICH. *Sixth volume of the Wren Society. Original drawings by Sir Christopher Wren* [*&c.*]. 4*o. Oxford.* 1929. £1 1*s.*

The sixth volume of the Wren Society's publications is a complete and delightful addition to its work. It is devoted to the problem of elucidating by reprints from drawings and documents the relative shares that Wren, Vanburgh and Hawksmoor had in the design of the magnificent group of buildings known as Greenwich Hospital.

The introduction is an able résumé of the subject by Mr. A. T. Bolton, who is to be congratulated on the results of his labours on this fine volume. Hawksmoor's report of 1728 on the founding of the Hospital follows. This was an appeal for funds to continue the work at a time when all was stopped for want of money, and resulted in a grant of £10,000 from Parliament. Then follow over 300 extracts from the minute books in the Record Office from the years 1694 to 1725; from these the initiation and progress of the work can be followed, the financial position, the piecework contracts, cost of materials and methods of procedure can be realised. The claim of Sir John Thornhill for painting the Great Hall, resulting in an agreement of £3 per yard for the ceiling and £1 per yard for the sides, is also included.

These and the fifty or more beautiful reproductions of the plans, elevations and sketches collected from six various and scattered sources bring all the interesting facts together for the library table in a handsome book from which the architectural historian can attempt to conjecture and disentangle which parts of the design can be attributed to their respective architects. The salient fact remains that Wren was responsible for the splendid lay-out of the main court and colonnades and that the royal donor's instructions led to this. At the first, Wren wanted to build the Hospital on another site on higher ground so that the scheme should not be complicated by the two existing buildings, viz., the King Charles II Pavilion and that known as the Queen's House. Queen Mary, however, ordered that the first should remain and that another block " answerable to it " should be built on the other side of a great court to be built with " great magnificence and order " and that the Queen's House of Inigo Jones was not to be demolished but that a central approach to it from the river was to be maintained. This occasioned the grand lay-out and colonnades as we see them today, and it is remarkable, in view of the difficulties of obtaining money for the work during the period in question, that the architects were able to proceed with the work in the grand manner, for monumental façades then appeared to be all-important as compared with the internal accommodation within the buildings.

THE CITY OF TO-MORROW.
BY H. W. CHESTER [*A.*].

THE CITY OF TO-MORROW AND ITS PLANNING. *By Le Corbusier. Translated from the 8th French Edition of* URBANISME *by Frederick Etchells.* 4*o. London.* 1929. *John Rodker.*

Readers of M. Le Corbusier's first book, " Towards a New Architecture," will of course be familiar with his theories on Modern Architecture. This book deals in particular with the modern city; its defects under modern conditions and a remedy for the evils of overcrowding, lack of light and air, traffic chaos and slum property. The book is admirably translated by Frederick Etchells, who has succeeded in retaining the spirit as well as the text of Le Corbusier's inimitable style. The translator is fortunate in his choice of title, for its romantic-sounding " City of To-morrow " is more likely to appeal to the reading public than the prosaic " town-planning " of the French text. But the author appears to regard his vision as the " City of To-day " rather than of to-morrow, which, as he states, never comes.

Le Corbusier commences by tracing the origin of the city, and compares the well-planned cities of Pekin, Babylon and those of the Romans with the mediæval cities, derived from the " nomads camp " and with the main streets, irregular and winding, following the " Pack-donkey's way." From such irregular beginnings most of our capitals have sprung, with the result that they are not efficient to cope with modern conditions.

His remedy is a drastic one. He would be a surgeon and use the knife unsparingly. He would destroy (in stages) and rebuild our modern capitals

Commercial buildings would be immense " sky-scrapers " at long distances from one another and surrounded by large open spaces with trees and vegetation in profusion. The resident population would be housed in relatively low tenement buildings also surrounded by parks. Streets would be arranged on the grid-iron plan, with crossings greatly reduced in number (at intervals of 400 yards), and would be in several tiers to take different classes of traffic. Gas, electricity and water services would be readily accessible in the lowest tier.

The scheme is thoroughly explained by the author and is well illustrated by numerous diagrams and plans. From the strict efficiency point of view there is much to be said for it, but he is perhaps unduly optimistic with regard to the economic aspect of the matter. Many people will scarcely see eye to eye with the author in the æsthetic aspect of matter. But this raises the controversial subject of modernism versus traditionalism.

The book is well produced and should prove of great interest both to the architect and general reader.

GREATER LONDON REGIONAL PLANNING.

BY W. HARDING THOMPSON [*F.*].

FIRST REPORT OF THE GREATER LONDON REGIONAL PLANNING COMMITTEE (*with Memoranda by Dr. Raymond Unwin*). 4*o*. *London*. 1929.

An event occurred in November 1927 which was of vital importance to the survival and future prosperity of London as a great metropolis. In that month, the Greater London Regional Committee was constituted under the auspices of the Rt. Hon. Neville Chamberlain, M.P., the then Minister of Health. This Committee consists of representatives of all the Advisory Bodies and Town Planning Authorities at work in the area which falls roughly within a radius of 25 miles from Charing Cross, and covers 1,846 square miles.

The work of preparing a comprehensive plan for this great region then began, under the technical guidance of Dr. Raymond Unwin, who has co-operated with experts engaged on regional schemes within the area—Professor Adshead, Mr. W. R. Davidge and Mr. Longstreth Thompson, in addition to Mr. Frank Hunt, C.V.O., the Valuer to the London County Council. Our President, Sir Banister Fletcher, has acted as Chairman of the General Committee since its inception.

Such a vast and densely populated region offers almost insuperable problems in re-organisation and the last two years have been fully occupied in investigation and research connected with the proper utilisation of land and future control of development. Until the various ways and means of effecting this have been examined, it is obviously impossible to grapple with the unwieldy octopus which during the last 100 years has been devouring the farm lands of six counties and absorbing towns and villages.

The first Report of the Committee has now been published; its excellent concise recommendations give little indication of the immense amount of investigation which has been carried out effectively during the past two years. These recommendations are based on memoranda submitted by Dr. Unwin on four fundamental matters, viz :—

(1) Open spaces and a green belt or belts round London.
(2) Ribbon Development and Sporadic Building.
(3) Additional Town Planning Powers required.
(4) A Regional Planning Authority for Greater London.

The Committee has also investigated the problem of the decentralisation of industries, but is not yet in a position to publish its conclusions. Much information has, however, been collected as regards :

(*a*) the existing industrial conditions in the Region,
(*b*) the probable developments in the near future,
(*c*) advantages and disadvantages of decentralisation, whether by the system of satellite towns or otherwise,
(*d*) means of counteracting any of the disadvantages of decentralisation,
(*e*) the possibility of effecting the removal of industries from the central districts.

In this connection there are some illuminating diagrams in the Report to illustrate the movement of population during the last seven years. Proper appreciation of this migration is essential before planning. It may be useful, therefore, to remind the reader that the estimated population of the Region in 1927 was over 8½ millions, increasing annually (in spite of the decrease of birth-rate) by 66,000. Moreover, the general tendency is for this population to move outwards. Ever since 1911 there has been a persistent emigration from the County of London area which rather suggests that commerce and industry are rapidly displacing the resident population, which, assisted by transport facilities and driven by economic pressure is migrating to the middle and outer rings of the Region.

A study of the present population figures has led Dr. Unwin to believe that we require provision for 279 square miles of open spaces in the Greater London Region, of which approximately 95 square miles would be utilised for Private and Public Playing fields, and in order to reach this minimum standard we must obtain by some means a further 63 square miles of playing fields and 143 square miles of other open spaces. It may be said that these requirements are based on the figure of 7 acres per 1,000 persons for playing fields, plus 10 per cent. of the total area of the Region as open space. The annual increase of population also demands an additional 460 acres of playing fields per year to keep pace with requirements. In Memorandum No. 1 there is a very lucid exposition of the financial difficulties inherent in the wholesale reservation of land for open spaces; Section X illuminates the debatable subject of "prospective building value" which is followed by notes on the practical application of the author's theory, with estimate of the expenditure involved in acquiring the necessary open spaces.

The problem of providing adequate open spaces is really interlocked with several other matters—with communications, industrial centres and density of population. It is all a question of distribution; and as the Report says :—"to secure a better distribution of population and industry throughout the Region is seen to constitute the basic problem of the plan. This underlies the solution of nearly all the other problems."

Dr. Unwin's Memorandum on "Ribbon Development" has been prepared in that convincing manner familiar to those who have read his thesis (published some years ago) on "Nothing gained by overcrowding" in regard to residential development. His argument against Ribbon Development is devoid of sentiment, although the disfigurement of the countryside is acknowledged; but it points out that firstly it is not economical, and secondly it is thoroughly dangerous to life and limb. The new arterial roads cost roughly £60,000 per mile and therefore the cost of a 10-foot width of roadway, sufficient for one track of vehicles is probably about £5 per lineal yard. When houses are established along an arterial road, vehicles which serve the frontagers take up one traffic unit in width and thereby diminish the efficiency of the artery for "through" traffic by so much that it would be infinitely cheaper to construct separate service roads to give access to new developments. Tentacular growth is also wasteful in public services. Again, by allowing building along main traffic routes, it entails innumerable side roads and garage drives, which cut into the stream of fast traffic at frequent intervals and so cause potential

collision points as well as reducing the speed of the highway users. All this appears such elementary common sense that it is incredible that the Ministry of Transport has not yet taken action to prevent sterilisation of the true function of these new arteries.

The remedy lies, so Dr. Unwin suggests, in one or all of the following three methods of control :—

(i) By the purchase of the frontage land on each side of every new artery.

(ii) By imposing restrictions as to the development of the frontages when purchasing the site of the road.

(iii) By regulating the development through Town Planning Schemes by the various Local Authorities concerned.

These methods are discussed in detail, and suggestions for avoiding other bad forms of sporadic development are also put forward.

In regard to the additional planning powers required, the Committee considers that the following are necessary :

(1) Joint Regional planning powers to be increased so that schemes dealing with larger matters of regional concern may be made and provisionally approved, without depriving Local Authorities or groups within the Region of the power singly or jointly to make schemes dealing in greater detail with their area, but conforming generally to the Regional Scheme.

(2) Power to be given for Joint Regional or Town Planning Schemes to include provision for the making of development or redevelopment schemes including, where desirable, schemes for redistribution of ownerships after deduction of a suitable proportion of the area for streets and open spaces.

(3) Town Planning powers to be extended so that schemes may include any land whether built upon or not.

(4) The powers of zoning, by means of Town Planning Schemes, to be extended so that areas may be allocated :—

(i) For building development in accordance with the Scheme.

(ii) For *reservation from building* development.

This last recommendation if adopted is pregnant with possibilities for sound planning, for at present the powers to keep land open are totally inadequate.

The final section of this valuable Report concerns the formation of a Planning Authority for the whole of the Greater London Region with powers for carrying their "master" plan into effect, but on condition that this Regional Committee should be required to consult the sub-regional Authorities and the Metropolitan Boroughs as well as any Town Planning Authority concerned before coming to a final decision on any proposal.

These safeguards may be wise, although one fears that the procedure of planning may be unduly long, and it would have been interesting to compare the probable results with the more autocratic procedure now in force in the Ruhr district of Germany.

The Report in its general form and arrangement is admirable and of immense interest to architects, town-planners and other technicians : it should appeal also to all intelligent laymen interested in the future growth of our great city. Moreover, the general principles expounded are applicable to the whole science of Regional Development elsewhere. It is very fully illustrated with photographs and diagrams which serve their purpose and one folding map showing all the existing and proposed open spaces in the region. Two informative appendices are included relating to the "Re-distribution of land in Germany" and to "Special Assessment as applied in Kansas City, U.S.A." The book is published at a price within the means of all.

An effort has this begun to reduce the chaos of London to something approaching an ordered organic unity. The existing confusion has been brought about largely by our inability to deal with strong vested interests, by the network of competitive railway systems, by the rapid growth of transport facilities and lastly by a lack of vision in the location of the post-war housing schemes.

We may hope that when the "master plan" for the region is eventually completed, and further powers acquired for carrying this plan into execution, there will be no excuse for more blunders on a grand scale. The official scheme for the Charing Cross Reconstruction would surely never have been submitted to Parliament if the authors had visualised its effects on the planning of south London. If the new Town Planning powers enable us to plan and zone the areas already built on it may be possible so to relate our industrial and housing areas that it will no longer be necessary for the workman who lives at Becontree for example, to travel expensively and uncomfortably to Hammersmith to his job or for the mechanic who works at Slough to make a daily journey from his home in London. The "straphanger" may become an extinct species, and by intelligent utilisation of land it should be possible to establish some reasonable relation between home, workshop and playing field.

The next Report will be awaited with interest, for the first one, by its grasp of fundamentals, augurs well for the future. The Committee and its technical advisor are to be congratulated on the first results of their labours.

STOCKHOLM TOWN HALL.

BY H. C. HUGHES [*A.*].

THE STOCKHOLM TOWN HALL. *By Ragnar Östberg. Sm. 40. Stockholm,* 1929. [*P. A. Norstedt & Söner.*]

Few buildings in the history of the world have received upon their completion praise so immediate and so wholehearted as this, or praise in Europe so unheralded by anticipation. The agonies of the war, the turmoil of the peace, left little time to listen to rumours of a Renaissance of art shaping itself in the northern mists ; so it, and its queenly building on the Melar Lake, rose new-born and yet full-grown like Venus. Now, there is no one who does not know of this building, but it is good to know it better and to have this book, the gift of its author, as a record of it and the company of artists who worked together on it. But it is more than a description of the building ; it is the history of the slow maturing of an idea. "God did not create hurry" is a Swedish saying that Professor Östberg quotes in his preface as a solemn warning to our hurrying age. Fifty years of deliberation in the Town Council preceded the decision to build, and in the mind of the young architect this became the one dominant idea. As early as 1893 he devised and exhibited a scheme for a municipal building, and it was then that was formed the friendship with Mr. Ohnell which was destined to be of

such importance. Then he travelled—to Chicago first, and later to most European countries—and it was the Town Halls that he studied, and how they expressed the character of their peoples.

It has lately been stated that the City Hall of Stockholm is one of many fine buildings which we owe to public competition. There is a little truth in this ; but only a little. "Perhaps no such masterly scheme as it shows could have the remotest chance of being executed in England. For its method of plan and manner of design could not be considered by any public or private promoters of a building enterprise, and certainly not by any assessor under our competition system. It is neither sufficiently commonplace nor enough of a modernist freak to win general approval. And as a proper design to a scale of $\frac{1}{16}$ it would be practically impossible to develop its real, its emphatic, first-rate qualities."

In 1901 Mr. Ohnell came to Östberg's little studio and told how for years the Committees had sat and discussed : how he was now determined to cut the Gordian knot of the uniting of a Law Court and a Municipal building by making them separate buildings, and asked the architect if he was still interested. Was he not !—and the two of them went at it, hammer and tongs, examining and sifting sites and problems, so that the Council bought then the site where the Hall now stands ; and it was determined to build the Law Court there. Then followed competitions—first a general prize competition, in which six architects were selected—then for these six the special competition with a modified programme. One of the assessors was Martin Nyrop, who built the Copenhagen Town Hall. This competition was won by Östberg, and in 1906 it was decided to build the Law Court in accordance with his modified plans. Then, just when the foundations of this building were to be laid, it was suddenly decided that the site ought to be reserved for a City Hall in the future, and the Law Court built on another site. The architect, in bitter disappointment, threw up the job, and it was carried out by the man who had been placed second in the competition, Carl Westman.

Subsequently, Östberg was appointed, though by only a slender majority in the Council, to make plans for a City Hall on the site ; but the Council lost interest in the project, and it was shelved again. "I was once more," he says, "to pass through several years of tormenting suspense." In 1911, however, the proposition was renewed, new plans were made, and at the last minute two great donations changed the scale, and it was decided to build ; and the councillor who had most persistently advocated the hall was made chairman of the Building Committee, which throughout the time of building supported the architect with exemplary patience, even through such revolutionary changes as making the summit of the great tower in wood and copper instead of granite.

So this building seems a life's work, written in life's blood. Professor Östberg tells how his office was established in an old house on the site ; and when that was pulled down, it was moved to a room in the new building. Everything was done on the site—large models prepared for every detail and judged in place—sweeping changes like the substitution of cut brick for blue marble in the Blue Hall decided—the many artists who co-operated were consulted on the spot.

For every detail of this building is finely wrought : if a prince painted on the walls, his choosing was as painter, not as prince. Furniture, glass in the exquisite candelabra, marbles, as well as painting and sculpture, were all by keen artists, and yet do really take their place most harmoniously in the whole. It is often felt that it is impossible in a modern building to secure this unanimity and so the architect controls all : but this building is a proof that given a great inspiring idea, such harmony can very well be maintained.

It is the lesson of this building that still to-day a great idea full of romance and association can inspire a band of artists to fulfil the dream dreamt by one, given time, support and freedom, and a real personality in the dreamer. Such a building springs very seldom in the great enterprises of to-day. All praise and honour to its author, Ragnar Östberg, and may much more work fall to his lot : still more praise to the City Council who allowed him to carry it through.

NOTES ON SOME RECENT FOREIGN PERIODICALS

By Graham B. Tubbs [*A.*].

The career of M. Jacques Doucet, of whom a memoir appears in the *Gazette des Beaux-Arts* for February, might be used as an analogy to the trend of architectural thought throughout the whole world. He was one of the foremost connoisseurs of French eighteenth-century pictures and furniture, and formed the most important collection since Sir Richard Wallace. Eventually he became dissatisfied with his fine Louis XVI house and its contents and put them up for auction, realising over half a million pounds sterling. This was in 1912, from which time M. Doucet devoted himself to forming another collection. At first he encouraged Degas and the Impressionists and later the more advanced of the modern schools. He, like many designers, felt that the work of the past was not entirely satisfying to-day and that this age should be encouraged to "be itself" and not to continue to copy the old *motifs*. Evidence that such thought is spreading is seen in the special number of the *Revista di Arquitectura* of Buenos Aires which is given up to modernistic work. The letterpress of this number is largely taken up by a translation of the discussion at the Architectural Association, London, which was initiated by Mr. R. A. Duncan's paper on "Modern Tendencies in Architecture." The illustrations are taken from recent work carried out, mostly in Buenos Aires, by Senor Virasoro, some of which is interesting and more restrained than is usual in South American work. In the February number of *Innen Dekoration*, the German magazine, Herr Fahrenkamp's Park Hotel is illustrated by a large number of photographs. The exterior is simple to the point of baldness and the interiors are almost equally severe, but are relieved by mural paintings and the effect in some cases is good. The same magazine has a delightful Viennese "wintergarten" which seems to be a kind of flowershop, by Professor Litchblau. The Swedish magazine *Arkitekten Maanedshaefte* for November has illustrations of work by Mr. Asplund, including his circular library at Stockholm, and a new theatre, Skandiateateren, in which

the seats are on one floor, with a series of boxes all round, forming a balcony. This month the German town planning magazine *Städtebau* has been amalgamated with *Wasmuths Monatshefte für Baukunst*, and in the January number of the combined magazine there are reproduced photographs of an extremely interesting motor showroom in Paris by MM. Leprade and Bazin. The façade consists of a vast expanse of glass, exposing to view a large hall, surrounded on the three inner sides by five galleries upon which the cars are displayed. The February number gives examples of the smallest type of house from various countries and prints an article on le Corbusier. This issue also has photographs of a series of houses at Hollywood by Frank Lloyd Wright. They are constructed on the system that this architect has evolved which makes use of square reinforced concrete blocks ; the general effect is very unusual and rather reminiscent of Maya work in Central America. Frank Lloyd Wright is also represented in the American *Architectural Record* for January by a number of coloured drawings for a glass skyscraper that he has designed for a site in the Bowery, New York. The apartments in this astonishing building are all to have living rooms running through two storeys and each is to have a completely secluded balcony. Its construction consists of concrete towers in the centre, from which the floors are suspended, the walls being almost entirely of glass. In the same magazine Louis Mumford writes on " Mass Production and the Modern House." He points out that it is inevitable that attempts will be made to produce houses in the same way that motor cars are made, *i.e.* in factories, but he shows that the analogy does not hold and that no really drastic reduction in cost is possible unless a large number of houses are erected at the same time and in the same place. This number has some interesting data on Prison Architecture and, as usual, with these reference numbers, the problem is most carefully analysed. The extraordinary precautions taken to prevent mutinies and prison-breaking are described with other details and the conclusion come to is that the skyscraper prison is probably the most satisfactory type for America. The shortcomings of the American penal system in the past is recognised and the author points out that England, with shorter sentences and better prisons, has less crime. In the February number of this paper there is much information on the subject of remodelling existing buildings and there are photographs of a number of new American shop-fronts in which the influence of modern Continental work is very apparent. The January number of the *American Architect* has eight pages of details of architectural leadwork and the February number gives a most interesting series of photographs of decorative glass-work including treatment of moulded, cut, and a combination of cut and leaded, glass ; photographs are given of the original treatment of the ballroom of the St. George's Hotel, Brooklyn, which is completely decorated by light from glass-covered troughs in the ceiling and vertical flutes forming a design on the walls. In the New York *Architecture* for January most of the space is given up to the work of Messrs. Holabird and Root, of Chicago, and the really extraordinarily fine commercial buildings erected by the firm are brought together. This is a most interesting firm, as although it is a new partnership, the principals are both sons of celebrated architects, Mr. Holabird's father being a partner of Holabird and Roche who designed the first metal-framed building (the Tacoma Building in Chicago) in the 'eighties, while Mr. Root is a son of the late D. H. Burnham's partner. The present office has a membership of 200 and includes departments for mechanical and structural engineering and interior decoration and sculptural work. The office procedure is described, showing how the job goes through the hands of the experts and the principals before the final scheme is settled. Certainly the results are satisfactory and the firm is well on the way to getting what the author of the article calls " the elusive æsthetic answer to American steel building construction." The principal buildings illustrated are the Chicago *Daily News* building, which is largely built over a railway track and includes on the site a large public " concourse " with fountains and bandstand ; the Palmolive Building, the Rand Tower, Minneapolis, and many interesting pencil studies for office buildings, as well as some delightfully freshly treated interiors. In the February number Gerald K. Geerlings writes on " Suggestions for External Plasterwork," illustrated by photographs of East Anglian buildings mostly from Ipswich, Lavenham and Hadleigh, while five houses by Dwight Baum of good, sound work in the Georgian manner, are given. The January number of the *Architectural Forum* is largely devoted to Airport design. Harvey Corbett puts forward an original scheme for an aerodrome in the form of a cone, having a 2 per cent. slope up to the centre ; all the hangars and administration buildings are put underground and trap doors are provided at intervals through which the machines emerge. The drawings submitted in the Lehigh Airports Competition are also given including the winning design submitted by Messrs. Zimmerman and Harrison. This plan shows a quadrant-shaped aerodrome on a rectangular site, with the administrative buildings and hangars grouped in one corner. The passengers reach the machines by way of an underground tunnel from the station-building to a star-shaped tower, from which telescopic metal tubes extend to the aeroplanes so that passengers can reach them entirely under cover. In Part 2 the construction of aeroplane hangars is considered, including an ingenious hexagonal building to take six 'planes, which is claimed to be very economical, and photographs of which are reproduced. In the January number of *Pencil Points* the old rule for " rise and tread " of staircases are submitted to ruthless analysis and a number of actual examples have been measured and reported upon. In many cases the most satisfactory ones are found not to conform to the rules. A form is reproduced which architects are asked to fill in giving measurements of examples known to them, so that a fair generalisation can be arrived at. In the Canadian paper *Construction* Messrs. Mathers and Holdenbury's University Club, Toronto, which was the result of a competition among its architect members, is illustrated. The winning design is a handsome building in the Adam manner. In the *Journal of the Royal Architectural Institute of Canada* for January Messrs. Nobbs and Hyde's Pulp and Paper Research Institute at Montreal is given and there is an article on hospital planning and equipment by Evan Parry and reproductions are given of paintings exhibited at the 51st exhibition of the Royal Canadian Academy.

The Library

THE OXFORD DICTIONARY.

It is interesting to record that, the last section of the dictionary (Wise-Wyzen) having been published, the last volume of this monumental work has now been bound by the Institute Library, and the completed work is now on the shelves available for members. The successive sections of the work, officially known as "A new English dictionary on historical principles," and originally edited by Dr. James Murray, have reached the Library as published, the earlier sections having been presented by the late Mr. Benjamin Ingelow [*F.*].

This work, a miracle of care, thoroughness and accuracy, both literary and typographical, is of great use to research workers, in that, although not a technical dictionary, its historical treatment enables the reader to trace early uses, early spellings, and sometimes earlier meanings. It is interesting to see that the name of the Institute is mentioned as one of the earliest uses of that word to denote a society devoted to a literary or other interest, and references to Institute papers also occur. Many of the references are to early works preserved in the R.I.B.A. Library, such as Moxon's *Mechanick Exercises*, and Leoni's edition of Alberti's *Architecture*, while Gwilt's *Encyclopædia* has been taken as a standard work for more modern terms. The dictionary can thus be studied in conjunction with Prof. R. Willis's *Architectural Nomenclature* (1844) and the more recent articles, *Some Ancient Building Terms* by Miss Beatrice Saxon Snell (R.I.B.A. JOURNAL, 18 December 1926, 22 December 1928).

Since the commencement of publication of the dictionary in 1884, many words have been added to the language and further researches have been made into ancient sources, and it is intimated that a supplement will be published. This may probably contain further references to technical terms, and thus add to our knowledge of the minutiæ of our profession. H. V. M. R.

NOTES BY MEMBERS OF THE LITERATURE COMMITTEE ON RECENT PURCHASES

[These Notes are published without prejudice to a further and more detailed criticism.]

GLAS IM BAU. By ARTHUR KORN. 4*o. Berlin.* [1929]. [*Pollak.*] £1 12*s.*

It has been commonly said that the architecture of the Middle Ages was a constant progression from darkness to light, from massive masonry to a mere framework of iron and stone. It might be said with far greater truth of a large amount of recent architecture. "Light, light, more light," till there is too much of it, and we must modify our transports. This book has an unusually good collection of pictures of buildings in which translucent glass is the most important feature; it has a few beautiful photographs of glass vessels; it almost ignores the use of glass for reflection purposes, which is nevertheless a most fruitful course for experiment, as may be seen in Mr. Forbes' house in Cambridge. Condensation and glare are the two great enemies: for some of the Dutch buildings illustrated glass for light is reduced to the texture of bricks. This is the sort of book that should be produced in England by the Plate Glass Association, for it shows the great possibilities of the use of that material

H. C. H.

ALT SLAVISCHE KUNST. By JOSEF STRZYGOWSKI. 4*o. Augsburg*, 1929 [*Benno Filser.*] £3.

Any new book of Strzygowski is an event in the history of architecture. The centre of his stage is always some land little enough known to most of the world; but in the wings we are at home. Here is traced the influence of the old Slav art on building and carving shown in small-domed churches of wood and stone, and decorative forms in stone, paint and embroidery. The illustrations range over many countries: they include familiar things like the churches at Grunford or Barton-on-Humber, and the gorgeous decorations of Viking art in the Oslo Museum. Archæologists may quarrel fiercely on the accuracy of some of the deductions; the man of no architectural knowledge will enjoy the painted wooden churches and the embroideries of which this book has lavish illustrations.

H. C. H.

LE MÉTAL, ed. by Jean Prouvé; LE VERRE, ed. by L. Barillet (L'Art international d'aujourd'hui); LA LUMINAIRE ed. by G. Tanneau. *Portfos.* 4*o. Paris* [1929] [*Editions Charles Moreau.*] 18*s. each.*

These three portfolios of plates give a very adequate idea of the trend of modern design. They belong to a series of publications on international art of to-day, but characteristically they deal almost entirely with French work.

Le Métal illustrates entrance doors, balustrades, lift enclosures, shop fronts, electric light fittings and door furniture, and shows very clearly the trend of design towards the use of contrasted planes and surfaces. The character of nearly all the designs is strictly geometrical and the flowing lines and rich decoration which was so prominent a feature five years ago has almost disappeared.

Le Verre shows similar tendencies but less successfully, for glass does not lend itself to reproduction in black and white. A good deal of the window treatments shown is restless in pattern, but there are many which make very effective use of different varieties of obscured glass. The volume is confined to window glazing, and does not include table or decorative glass in the round.

La Luminaire is very rich in suggestion. Here, too, the advance of a strictly geometrical basis of design is evident. This, however, does not monopolise the field, and there are very delicate and beautiful examples of cast glass fittings by Lalique and Sabino which are richly ornamented. The interpenetration of planes of metal and glass have provided many designers with inspiration, but it is obvious that this is a mode which will rapidly exhaust itself on account of its liability to facile imitation. We particularly note the design of the glass and metal work in a fitting which consists chiefly of a plain white sphere of glass. Every architect must have been baffled by the difficulties of securing a satisfactory fitting of this kind, and our manufacturers might well adopt something of the kind.

J. M. E.

SKYSCRAPERS AND THE MEN WHO BUILD THEM. By W. A. STARRETT. 8*o. New York and Lond.* 1928. [*Scribners.*] 12*s.* 6*d.*

This is an American book, written for architects by a civil engineer of wide experience in his subject.

Our own interest in skyscrapers is apt to be confined to their æsthetic and civic aspects; but readers of Colonel Starrett's book will obtain a vivid glimpse of the process by which the building of a skyscraper is initiated and carried to completion. They will find, too, much detailed and interesting information about methods and materials and about the whole organisation of the work; and Colonel Starrett's survey is wide enough in its range to include a historical account of how skyscraping began in America and some conjectures as to its development in the immediate future.

A. L. N. R.

Correspondence

EASEMENTS OF LIGHT.

39 *Maddox Street*,
London, *W*.1.
31 *May*, 1930.

To the Editor, JOURNAL R.I.B.A.

SIR,—I have observed in the JOURNAL of 24th instant, a letter by Mr. Percy J. Waldram, commenting upon the report of a paper I read at a recent meeting of the Sheffield and South Yorkshire Society, held at the Sheffield University.

Mr. Waldram calls attention to an allusion in the report to the case of Sturges *v*. Bridgman, which came before the Court of Appeal. First, he observed that the report did not give the citation and then expressed the view that, as it is a pre-Colls case, the judgment "would therefore be subject to correction by the decision in the Colls case." He finally directed attention to the judgment in the case of Horton *v*. Beattie, the decision in which he regarded as "the precise opposite." His letter concludes with the comment "any dictum in a judgment prior to the House of Lords decision of Colls does not necessarily carry any weight to-day. This possibly explains the absence of any mention of the case cited in Combe's *Law of Light*.

It is to be regretted that Mr. Waldram wrote this letter, without first observing my own comments on the cases of Sturges *v*. Bridgman and Horton's Estate, Ltd. *v*. James Beattie, Ltd., which appear on pp. 141 and 142 of my recent book, entitled—"Easements of Light: Modern Methods of computing Compensation." Reports in professional journals of lectures have necessarily to be condensed to the uttermost, and it is not fair to comment upon part of the opinions expressed, when the opinions are accessible in print, in a fuller and more comprehensive form. If he had looked at the pages I have mentioned, he would have found that I do give the citation of the case of Sturges *v*. Bridgman and that the report appears in 2 Ch. D. 852, at page 865. He would also have read that this was only a casual expression of opinion by Lord Thesiger, and that the case related to an entirely different matter. Owing to this circumstance, I suggested that the judgment should be read in conjunction with that given in Polsue and Alfieri, Ltd. *v*. Rushmer, reported in 1907 Appeal Cases, at page 12. Mr. Waldram is not correct in stating that the case of Sturges *v*. Bridgman is not mentioned in Combe's *Law of Light*. It is mentioned in no less than three places in my own copy, which is dated 1911. I refer to pages 3, 153 and 158.

On page 142 of my book, I quoted a portion of the judgment in the case of Horton *v*. Beattie, which was dealt with in a Court of First instance only, and concluded by making the deduction that the action of Mr. Justice Russell (as he then was), in granting an Injunction for the purpose of protecting the easements of light of property in Darlington Street, Wolverhampton, despite the lack of amenities enjoyed, is not inconsistent with the view that the special value of property in the more favoured parts of a town is due in part to and dependent upon a better standard of daylight illumination.

No one is likely to disagree with Lord Russell's view that "the human eye requires as much light for comfortable reading or sewing in Darlington Street, Wolverhampton, as in Mayfair," but we have yet to learn whether the Court of Appeal will uphold the view that the standard of lighting required to survive in order to eliminate the existence of a nuisance is of necessity an absolute standard. Although the minimum of adequacy for vision may be the same in Wolverhampton as in Mayfair, it has yet to be proved that the loss of a higher standard of illumination than the minimum of adequacy would not constitute a nuisance in the best and most valuable parts of (say) Mayfair, which are in the enjoyment of most amenities, even if it should be found that the loss of exactly the same standard might not necessarily constitute a nuisance in the least favoured parts of Wolverhampton, where workpeople are no doubt accustomed to submit to a greater amount of inconvenience. Higher prices are only paid for land on account of the various amenities and other advantages enjoyed. Surely it is not unreasonable to assume that one of the advantages for which additional money is paid is a better standard of daylight illumination. If that be so, the loss of that standard might be held to constitute an actionable nuisance, especially if it could be shown that the loss of that higher standard would cause appreciable loss of rental or capital value. Whatever view the Court of Appeal and House of Lords may eventually take regarding this very interesting point, there can at least be no doubt that a given infringement of direct daylight could not be compensated by payment of the same monetary amount, in respect of property in Belgrave Square and property in the least favoured parts of Bermondsey. Whether the measure of nuisance be the same or not, the rate of compensation for a given infringement is certainly not a flat rate in all districts, but varies, on the other hand, with the rental or capital values of the buildings affected. In fact, as we all know, it has sometimes to be calculated on the basis of damage done to the goodwill of the business conducted on the premises in question.

I should like to conclude by quoting a passage from the judgment of Lord Loreburn, L.C., in a post-Colls case, Jolly *v*. Kine, 1907, A.C. 1, at p. 2. "The right of the owner or occupier of a dominant tenement to light is based upon the principle stated by Lord Hardwick in 1752 in Fishmongers' Co. *v*. East India Co., that he is not to be molested by what would be equivalent to a nuisance. He does not obtain by his easement a right to all the light he enjoyed. He obtains a right to so much of it as will suffice for the ordinary purposes of inhabitancy or business *according to the locality or surroundings*." It is difficult to imagine that Lord Loreburn would have added the words—"according to the locality or surroundings," unless his Lordship had considered that the extent to which an infringement of light could constitute a nuisance would vary according to the locality or surroundings. The case of Jolly *v*. Kine was heard in the Court of Appeal, whereas the Judgment in Horton *v*. Beattie was given, as already stated, in a Court of First instance.—Yours faithfully, JOHN SWARBRICK [*F*.]

PAINTING ON PLASTER AND CEMENT

11 *April* 1930.

To the Editor, JOURNAL R.I.B.A.—

DEAR SIR,—It is a matter of common experience that when linseed oil paint is applied to cement rendered surfaces which have not been given sufficient time to dry out, failure of the paint film often takes place. The degree of failure may vary from a few unsightly patches to a general softening and tackiness of the paint, sometimes accompanied by the formation of wrinkles and blisters containing a yellow liquid. Such a type of failure is also liable to occur on plastered surfaces.

It is commonly supposed that these failures are directly due to the presence of lime which on account of its caustic nature may destroy the oil film and also attack many classes of pigments causing bleaching of the paint. On this account the pigments which resist attack have been termed " Lime fast."

This type of failure has been the subject of recent investigation at the Building Research Station and the results obtained have thrown rather a new light on the problem. After a series of tests it has been demonstrated that such failures are not caused by lime alone, and that it is possible to paint on a freshly prepared lime plaster surface without any softening or bleaching of the paint film taking place, even when the pigment used is not " lime fast."

If, however, soluble salts of soda or potash are also present, the paint film is quickly attacked unless the material is quite dry. The reason for the destruction of the paint is that in the presence of moisture the alkali salts are causticised by the lime, forming caustic soda and potash which decompose the oil film. The tackiness which is experienced in such cases is due to the soluble soaps which are formed as a result of the reaction.

Portland cement nearly always contains both free lime and soluble salts of soda and potash. Hence painting upon Portland cement rendering before it is thoroughly dry and well matured (that is to say before the free lime contained in it has been carbonated by a long period of exposure to the atmosphere) usually results in failure. Some classes of lime are liable to contain alkali salts, whilst clay, introduced in dirty sand, is also a source of these salts.

Besides elucidating the cause of a number of failures experienced by painters, it will probably prove possible to utilise the reaction to demonstrate the presence in a given material of amounts of calcium hydroxide or soluble alkalis which are likely to cause trouble. It is hoped to publish shortly a full account of the experiments which have led to these conclusions.—Yours truly.

R. E. STRADLING [*Hon. A.*],
Director of Building Research.

THE ENGLISH COUNTRYSIDE.

The following letter from Sir Hilton Young was published in *The Times* of 3 June :—

To the Editor of "The Times"

SIR,—The recently announced dropping of the Rural Amenities Bill was not in fact due to my being called away. It was because the state of business made it hopeless that it should become law, and so it was unfair to ask members and officials to waste their time on it in committee. On the occasion I have received a courteous and encouraging letter from the Minister of Health, containing the following passage, that will be welcome to all those who gave so freely of their time and knowledge to make the first Bill a success.

Its introduction has been of real value. The second reading debate not only showed how great is the support among all parties for the principles of such a measure, but also enabled many of the problems inherent in legislation of this nature to be ventilated. You ask me about the intentions of the Government. The Government have undertaken to introduce, although not, of course, in this Session, a Town-Planning Bill. Obviously I cannot anticipate the Bill, but I can assure you that it will be a comprehensive measure, including express powers for the preservation of rural amenities, and in its preparation the experience we have gained from the introduction of your Bill will certainly be of great assistance. . . . By devoting so much time and trouble to the rural amenity problem you have made a substantial contribution to its solution.

I quote Mr. Greenwood's concluding words in order that I may pass the palm on to those to whom it is due—the experts, the members, the Press, and the public, who took such a helpful interest in the Bill, and thereby so notably advanced the cause that we all have at heart.—Yours faithfully, E. HILTON YOUNG.

Baghdad, Iraq.

KING'S BIRTHDAY HONOURS.

The following names appeared in the official list of honours conferred by the King on his sixty-fifth birthday.

KNIGHT.

Professor Leonard Erskine Hill, M.B., M.R.C.S., L.R.C.P., F.R.S., Hon. A.R.I.B.A., Director, Department of Applied Physiology, National Institute of Medical Research.

K.C.I.E.

Sir Herbert Baker, lately Architect, New Delhi and Architect of India House, London.

C.I.E.

Robert Tor Russell, Esq., D.S.O., lately Architect, New Delhi.

C.V.O.

Evelyn Campbell Shaw, Esq., M.V.O., Hon. A.R.I.B.A.

O.B.E.

Charles Albert Battie, Esq., L.R.I.B.A., Assistant Architect, Metropolitan Police Office.

WINDMILLS OF GREAT BRITAIN.

The S.P.A.B. intends to make a record with photographs of all the windmills still standing in Great Britain and publish it in book form. The Society also wishes to raise a fund so that a few carefully selected mills in different parts of the country may be bought, repaired, and maintained as interesting monuments. The record of windmills in Warwickshire and Cambridgeshire has already been completed, and several other counties are almost finished. Any information or photographs will help the Society considerably in its work.

Subscriptions and information should be sent to the Windmill Secretary, The Society for the Protection of Ancient Buildings, 20, Buckingham Street, London, W.C.2.

Allied Societies

(The attention of Members of the Allied Societies is particularly called to this page)

ULSTER SOCIETY OF ARCHITECTS.

The annual general meeting of the Ulster Society of Architects was held in the Society's Rooms, 7 College Square North, on Monday, 12 May 1930 at 8 p.m., when there was a large attendance of members present, Mr. E. R. Kennedy (President) being in the chair. The Honorary Secretary read the annual report which contained full details of the work of the Council for the past year. The report was unanimously adopted.

The Honorary Treasurer then read the statement of accounts for the year 1929, which show the funds of the society to be in a sound position. The statement was also unanimously adopted.

The following members were elected by ballot as Council for the year 1930–1931 : J. A. Davidson [*A.*], President ; R. H. Gibson [*F.*], Vice-President ; R. S. Wilshere [*A.*], Hon. Treasurer ; J. MacGeagh [*A.*], Hon. Secretary. *Members of Council*—T. R. Eagar, E. R. Kennedy [*F.*], G. O'Neill, J. Seeds [*F.*], K. Edwards [*F.*]. *Associate Members*—B. Cowser [*A.*], C. T. McLynn. *Hon. Auditors*—T. Callender, J. Scott.

YORK AND EAST YORKSHIRE ARCHITECTURAL SOCIETY.

The annual general meeting of the York and East Yorkshire Architectural Society was held at the Adelphi Hotel, York, on 24 April 1930.

The President was in the chair. The Annual Report and Statement of Accounts were presented and approved.

The President (Mr. Dudley Harbron, F.R.I.B.A.), in a review of the activity of the Society during the past session, said that the membership of the Society had been maintained. There were still some architects in their area who should join the Society, and he urged that the members should get in touch with those of their acquaintance and persuade them to join. It was encouraging to find that most of the students in the area were members, and that they took an active interest in its proceedings, as witnessed by the presence of several of them at this meeting. If the younger men continued to support them, they as a society had nothing to fear.

The competition for prizes awarded to the students was the field of friendly rivalry, and the standard of the work submitted was pleasingly high.

They had had the Conference in their area, and thanks to the weather, the support of the civic authorities, and the architectural interest of the district it had been a success. They themselves had enjoyed the company of their appreciative visitors

In York the Society had been consulted by the Corporation with reference to the proposed restrictions on building operations in the built-up historic area, and the Council had approved the suggestion of the committee set up by the Society to report on the matter. In Hull the Education Authorities had formed an advisory committee upon which the Society was strongly represented, and their deliberations had improved the educational facilities, and in course of time these improvements would bear fruit.

They were endeavouring to secure some of the design of public works in the area for the private practitioner, the encroachment upon whose former activities by public bodies was most noticeable. So far, save in the case of the new street in Hull, they had not met with the success desired. They were anxious to see the Registration Bill upon the Statute Book, and the Society was in touch with the Parliamentary representatives throughout the Riding.

Something more might be done to stimulate the interest of the membership and the public by lectures, and he wished that in the next session they would make the attempt by presenting one of those lectures of which they had had the offer.

He thanked the members for their renewed confidence, and hoped that the Society would continue to increase its usefulness to the profession.

The election of officers and Council for Session 1930–31 resulted as follows :—

President: Mr. G. D. Harbron [*F.*]. *Vice-Presidents:* Mr. K. Ward [*L.*], Mr. H. Andrew [*F.*], Mr. F. J. Horth [*F.*]. *Hon. Secretary :* Mr. R. Jackson [*A.*]. *Hon. Treasurer :* Mr. E. A. Pollard [*L.*]. *Council :* Mr. C. D. Allderidge [*A.*], Mr. W. E. Biscomb, Mr. C. H. E. Bridgen [*F.*], Mr. C. Leckenby [*A.*], Mr. C. W. C. Needham [*A.*], Mr. J. E. Reid, Mr. T. Snowden [*F.*], Mr. A. N. Thorpe, Mr. A. Hick.

Obituary

JOHN HENRY WOODHOUSE [*F.*].

When John Henry Woodhouse died on December 21st 1929, at the age of 82, Manchester lost a good architect and a man of winsome personality, who loved his profession and all his fellow-workers.

At a very early age he showed artistic promise, and was accordingly sent to the Manchester School of Art, where he quickly made his mark. It is worthy of note that when Mr. Philip Nunn, a Manchester architect, saw the boy's beautiful handwriting, he offered to take him into his office as a pupil without the usual fee. And before he had been long with him, while still a pupil, Mr. Nynn actually made him a present of £100, in recognition of his beautiful draughtsmanship and excellent work.

He began his independent career in King Street, Manchester. In partnership with Mr. S. Smith and Mr. George Willoughby, and later with Messrs. Corbett and Dean, he designed many important buildings in the North and Midlands of England, including the Manchester Fire Station, Bury Free Library and Art Gallery, the Y.M.C.A. Buildings in Peter Street, Manchester, the School Board Offices of Salford, a very great number of grammar schools, council schools and technical schools in various parts of the country, a number of private houses, a beautiful rood-screen in St. James's Church, Brighouse, the Church Hall, Brighouse, and several war memorials.

For some years he was Consultant Architect to the Diocesan Board of Finance, and made a great number of plans for modernising and improving out-of-date Church of England schools.

From 1905 to 1907 he was President of the Manchester Society of Architects.

To make a list of the buildings designed by J. H. Woodhouse is not, however, sufficient to give a just idea of his rare quality. He had a joy in his work which enriched the whole of his long life, and which remained with him to the very end. "Work is the blessing of the Curse" was one of his favourite sayings. Certainly it was a delight to him. And because he had an inborn love of

his profession and also of his fellow-creatures, he rejoiced in holding out a helping hand to the young and untried members of the profession. More than one prosperous architect remembers his ready kindness with affectionate gratitude. "He always showed a sympathetic interest in all of us, and therefore held a special place in our affections. His cheery presence will be sadly missed at our meetings," writes a Manchester architect.

One word more. It is not fitting that even a brief notice of J. H. Woodhouse's life should omit all mention of him as a good and zealous Churchman. For 72 years he was a member of the choir of St. Andrew's Church, Manchester, and his place was rarely empty. His was a wonderful record of service and devotion to duty.

The good architect built his own life on a sure foundation.

E B.

JOSIAH GUNTON [*F.*].

Josiah Gunton was born at Manea in the Isle of Ely in 1861. He came to London at the age of 15 and was articled to the firm of Gordon and Lowther in Finsbury Circus. Ten years later he became a partner and when Mr. Lowther died, the firm became known as Gordon and Gunton, under which title it carried on until shortly before Mr. Gordon's death in 1916.

In 1916 Mr. Gunton took into partnership his son, William Henry Gunton, and the firm became known as Gunton and Gunton.

Mr. Gunton became a Fellow of the Royal Institute of British Architects in 1899.

During his long business career in the City he was responsible for many important buildings both of a civic and religious character. The latter were almost entirely on behalf of the Wesleyan Methodist Church. He was one of the first architects doing Church work to devise the type of building now so much in evidence, generally known as Central Halls, and exercised a very considerable influence in the development of Nonconformist Church buildings.

Among the most notable examples of this kind of work may be mentioned the Central Hall at East Ham, built more than 25 years ago. Other examples are to be found at Chatham, Bromley, Hackney and better known to the general public, Kingsway Hall.

He was responsible for over 100 Wesleyan churches and schools, the most notable of these probably being at Sutton, Cambridge and Penzance.

On the civic side, his long connection with the City brought him a large share of important work, which can be divided into pre-war and post-war. The former which was the longer period was mostly in conjunction with the late Henry Gordon and other partners.

Amongst a large number of city banks and offices the most notable was probably the development around London Wall and Finsbury Circus, which is now known as London Wall Buildings ; and the further development on the east side of Finsbury Circus which is distinguished only as No. 16 Finsbury Circus. This building covers the transitional period, as it was started in 1913 and completed in 1920.

Subsequent to the War in conjunction with his later partners he was responsible for a further number of bank and office buildings, the most prominent probably being Aldwych House and the development of most of the Old Post Office site in the City.

JOSEPH OSWALD [*F.*].

Mr. Joseph Oswald, of 97 Osborne Road, Newcastle, died on 15 January in his 79th year. He was born on 19 March 1851 and served his time with his father, Septimus Oswald, being admitted into partnership in 1876.

Mr. Oswald enjoyed a large general practice in and about the North of England and held a deserved reputation in his profession.

When Newcastle Races were removed from the Town Moor to High Gosforth Park in 1881, under the auspices of a limited company, with the late Mr. Charles Perkins at its head, Mr. Oswald was employed to lay out the various enclosures and to design the stands, etc., being also commissioned in a like capacity by the late Mr. C. W. C. Henderson, when the Hexham Steeplechases were resuscitated about 1890. Since then, the firm have been associated with similar works at nearly all the racecourses in Scotland and the North of England.

Mr. Oswald designed the mansion built by Mr. Charles Perkins at Gallowhill in the year 1888, and was employed on several other works of a similar nature in the country. He designed the offices of the Newcastle Breweries, Ltd. (a perspective of this building was exhibited at the Royal Academy, 1902), in the Haymarket, and remodelled or rebuilt a very large number (well over a hundred) of inns throughout Northumberland, Durham and Yorkshire, as well as chapels at Morpeth, Heaton and Gosforth, etc. Along with his son, he was responsible for the rehabilitation of the Central Exchange Buildings after the destructive fire in 1901.

Mr. Oswald was elected President of the Northern Architectural Association in 1893 and again in 1894 and, in the same years, was a member of the Council of the Royal Institute of British Architects.

W. J. MORLEY [*F.*].

The death occurred on 16 March, after a short illness, at his residence, 14 Park Drive, Heaton, Bradford, of Mr. William James Morley, a well-known architect, of the firm of W. J. Morley and Son, Swan Arcade, Bradford. He was 83 years old. Mr. Morley had planned several large buildings, including the mills at Paisley, owned by Messrs. J. and P. Coats, the Central Hall, Manchester, the Albert Hall, Manchester, and the Eastbrook Hall, Bradford. He had designed a large number of Nonconformist churches all over England and Wales.

XIIth INTERNATIONAL CONGRESS OF ARCHITECTS.

BUDAPEST, SEPTEMBER 8TH TO 14TH 1930.

At the last meeting of the Permanent International Committee of Architects, held in Paris on the 25th May 1929, it was decided to accept the invitation of the Municipal Council of the City of Budapest and the Hungarian Section C.P.I.A. to hold the next international congress in that city.

The arrangements for the Congress are now well advanced, and an excellent programme of papers for discussion and visits to buildings and places of interest has been drawn up by the Organising Committee, of which M. Robert Kerterz, Architect and Secretary of State to the Hungarian Government, is the President.

The opening session of the Congress will take place on Monday, September 8th, and the proceedings will last until Sunday, September 14th. The agenda will include papers and discussions on the following subjects :—

(1) Architectural Education with special reference to organisation and modern practice.
(2) Registration and rules of professional practice.
(3) Artistic Copyright as applied to architecture.
(4) The rôle of the Architect in modern commercial buildings.
(5) A comparison of the acoustic properties of large halls.

The debates will be conducted in one of the four languages officially recognised—English, French, German or Italian, and any points of interest will be translated, on the request of any member present, by the official interpreter.

During the period of the Congress there will also be an international exhibition of modern architecture in the Art Gallery of Budapest, where a selection from the work of architects of the twenty-eight countries represented on the Permanent Committee will be shown by plans, drawings, models and photographs, among which will be a collection of photographs of modern British work which is being arranged by the Art Committee of the R.I.B.A.

For the convenience of those who wish to attend the Congress the following particulars with regard to travelling and hotel accommodation has been prepared by Messrs. Thos. Cook and Son, Ltd.

OUTWARD JOURNEY.

Friday, Sept. 5th.	Depart Victoria	2.0 p.m.
	(via Folkestone, Boulogne, Bâle)	
Sunday, Sept. 7th	arrive Vienna	6.50 a.m.
	depart Vienna	7.20 a.m.
	arrive Budapest	1.10 p.m.

RETURN JOURNEY.

Monday, Sept. 15th	depart Budapest	4.30 p.m.
	arrive Vienna	9.58 p.m.
	depart Vienna	11.0 p.m.
Wednesday, Sept. 17th	arrive London (Victoria)	3.30 p.m.

Inclusive fare, £24 15s. each passenger (for a party of not less than twenty-five persons).

This fare includes second class return rail and first saloon on steamer, reserved seats, and all meals and gratuities to restaurant car attendants on outward and return train journeys. Accommodation at the Hotel Saint Gellert, Budapest, consisting of café complet, table d'hôte lunch and dinner, bedroom and tips to hotel staff, etc., commencing with luncheon on September 7th and terminating with luncheon on September 15th and also conveyance of members and their baggage from the station to hotel and vice versâ on arrival and departure.

It should be noted that the inclusive rate given above only applies to a party of not less than 25 travelling (on the outward journey) together. The rate given is for 2nd class on railways, but any member who wishes to do so can travel first class or by sleeping car by paying a supplement.

The supplement for 1st class return is £6 19s. 6d.

For sleeping car berths (Boulogne–Bâle), 1st class only, £9 2s.

Sleeping car berths, first class (Vienna–Bâle) .. £8 19s.

Sleeping car berths, second class (Vienna-Bâle).. £1 13s.

As accommodation on trains and, more especially in the hotels at Budapest is limited, any members who intend to join the party are requested to send their names and application for tickets and hotel accommodation as soon as possible to Lt.-Col. H. P. Cart de Lafontaine, O.B.E., the Hon. Secretary, British Section C.P.I.A., 9 Conduit Street, London, W.1, in order to avoid possible disappointment.

THAMES BRIDGES CONFERENCE.

The following resolution was passed at the last meeting of the Thames Bridges Conference, held on 20 May 1930 :—

The Thames Bridges Conference places on record its satisfaction that the Private Bill Committee of the House of Commons, by rejecting the official Charing Cross Bridge scheme, has saved an important part of central London from permanent injury by radically defective planning.

The Conference at the same time reiterates its conviction that a road bridge at Charing Cross is urgently required, and that immediate steps should be taken by H.M. Government :

(i) To inquire into the railway position in regard to the development of London, including the relationship between the tubes and the suburban railways.

(ii) To secure by competition (open to architects, engineers, and town planners) a plan, in accordance with the data obtained, for the future development of Central London (on both sides of the river), including Charing Cross Bridge and its approaches.

The conference is further of opinion that in view of the evidence given before the committee on the subject of Waterloo Bridge the underpinning and reinstatement of that bridge should now be proceeded with.

INCOME TAX ALLOWANCES.

Arising out of an inquiry from a member with regard to relief in respect of expenditure for entertainment of clients, recently published in THE JOURNAL, the following information is reprinted by permission from the *Architects' Journal* :—

Although entertaining expenses appear to be a troublesome item when computing profits for the purposes of income tax, they should be easily dealt with if only proper records were kept of them and put through the books in the same manner as any other expenses are recorded.

In large companies where entertaining expenses are incurred the managers and other heads of departments are obviously reimbursed for such expenditure, and it therefore must be put on record in the books, but in the case of one man businesses and professions such as an architect's, the matter is different.

For instance, many professional men in the course of their daily routine have, for business or professional purposes to entertain customers or clients and they usually pay for such expenses out of their personal cash and forget to make any record of them.

When the accounts are reviewed for income tax purposes, inspectors are always wary of expenses claimed beyond accounting records, that is to say, the taxpayer says : " But I have never charged anything for entertaining expenses, and I ought at least to have an allowance, say, of £50." It is therefore absolutely necessary to treat this item on exactly the same terms as any other expense, and make out a proper voucher for the amount incurred with reasonable details thereof, which should be signed and dated and filed with the usual receipts.

The general practice is that all reasonable expenses of entertaining are allowed for income tax purposes, and if they are surcharged by the Inland Revenue Authorities an appeal should be entered forthwith and fought out—but provided records and proper explanations are forthcoming (if required) there should be no trouble in having this item treated as a charge.

Many companies and firms do not even show this item separately, but include it under headings such as " General Expenses," " Business Expenses," " Trade Expenses," etc., but to my mind this is apparently not necessary ; why not make a clear item of this expense and stick to your figure ?

R.I.B.A. MAINTENANCE SCHOLARSHIP IN ARCHITECTURE.

The Royal Institute of British Architects offer for award in July 1930 one R.I.B.A. Maintenance Scholarship in Architecture of a maximum value of £100 per annum, tenable from October 1930.

The Scholarship will be tenable in the first instance for one year, and will be renewable for two further periods of one year each. It is intended to enable a student, who has not the necessary means, to attend an approved course at one of the Schools of Architecture recognised for exemption from the R.I.B.A. examinations. Students who are already taking such a course are also eligible to apply for a Scholarship.

The value of the Scholarship, up to the limit of £100, will depend upon the financial circumstances of the parents or guardians of the candidates. The parents or guardians will be required to furnish particulars on the proper form, of their financial position.

Particulars and forms of application may be obtained free on application to the Secretary to the Board of Architectural Education, R.I.B.A., 9 Conduit Street, London, W.1.

The closing date for the receipt of applications, duly completed, is 30 June 1930.

R.I.B.A. PRIZES AND STUDENTSHIPS.

Attention is called to the fact that the Council of the R.I.B.A. have decided that after 31 January 1931, in addition to the existing qualifications, competitors for the Tite Prize must at least be registered Probationers R.I.B.A., while competitors for the following prizes must at least be elected Students R.I.B.A. :—

The Soane Medallion.
The Victory Scholarship.
The Owen Jones Studentship.
The Silver Medal for Essays.
The Henry Saxon Snell Prize.
The Alfred Bossom Travelling Studentship.
The Grissell Prize.
The Neale Bursary.
The Hunt Bursary.
The Godwin and Wimperis Bursary.

Notices

THE FIFTEENTH GENERAL MEETING.

The fifteenth General Meeting (Business) of the Session 1929-30 will be held on Monday, 16 June 1930, at 8 p.m., for the following purposes :—

To read the Minutes of the Ordinary General Meeting held on Monday, 26 May 1930; formally to admit members attending for the first time since their election.

To proceed with the Election of Candidates for membership whose names were published in the Journal for 24 May (see pp. 534-535).

To read the report of the Scrutineers appointed to examine the voting papers for the election of the Council and Standing Committees for the Session 1930–31.

INFORMAL DISCUSSION OF MATTERS OF PROFESSIONAL INTEREST.

At the conclusion of the above General Meeting, there will be an informal and private discussion of matters of current professional interest or concern. Members are invited to bring up for discussion, with or without notice, subjects of professional interest or difficulty.

THE RESTORATION OF ST. PAUL'S CATHEDRAL. SPECIAL GENERAL MEETING AND EXHIBITION.

MONDAY, 23 JUNE 1930, AT 8.30 P.M.

A Special General Meeting will be held on Monday, 23 June 1930, at 8.30 p.m., when a lecture on "The Restoration of St. Paul's Cathedral" will be delivered by Captain C. Stanley Peach [*F.*], and Mr. W. Godfrey Allen [*F.*].

The lecture will be illustrated by lantern slides and by an exhibition of models, masonry specimens, drawings and photographs.

The exhibition will be open daily in the R.I.B.A. Galleries from Monday, 23 June to Saturday, 28 June inclusive, between the hours of 10 a.m. and 8 p.m. (Saturday, 5 p.m.).

BRITISH ARCHITECTS' CONFERENCE, NORWICH, 18–21 JUNE 1930.

Final arrangements for all the events of the Conference are now being made. It is hoped that all members who have not already done so will at once refer to the programme sent to them with the JOURNAL on 10 May, and send in their names for such of the events as they desire to take part in without delay.

Members of the R.I.B.A. and the Allied Societies who are officials of local authorities are asked to notify the Secretary R.I.B.A. if they would like formal invitations to be sent to such authorities to appoint delegates to the Conference.

MEMBERS' TOUR TO THE UNITED STATES AND CANADA.

In view of the success which attended the visit to the United States and Canada of a party of members of the R.I.B.A. last year, and as many members who were unable to avail themselves of that opportunity expressed a desire to undertake such a trip on a future occasion, it has been decided to organise a further party this year.

The numerous advantages to be gained by undertaking a visit to the United States and Canada from an architectural point of view will be obvious, particularly when the visit is made in company with fellow-members of the Institute.

The suggested tour will include New York, Philadelphia, Washington, Detroit, Niagara Falls, Toronto, Ottawa and Montreal, and notes regarding the places of interest from an architectural standpoint, compiled by Mr. Percy E. Thomas, O.B.E., F.R.I.B.A., the leader of last year's party, will be available for members.

The duration of the trip will be approximately one month, and the cost, including cabin class accommodation on the Atlantic steamers, hotel accommodation in the United States and Canada, rail fares, etc., will be about £80. This amount is exclusive of meals ashore, gratuities, transfer of passengers and baggage between stations, steamers, hotels, etc., and sight-seeing trips.

The party will travel from Liverpool for New York by the Cunard Liner *Samaria* on 5 July, returning by the *Ascania* from Montreal to Plymouth and London on 25 July.

Relatives and friends of members will be welcomed.

Members interested are requested to apply to Mr. H. T. Leese, The Cunard Steamship Company, Ltd., 26-27, Cockspur Street, London, S.W.1, who will be pleased to forward a complete itinerary, etc., on request.

OVERSEAS APPOINTMENTS.

Members contemplating applying for appointments overseas are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

WILLIAM H. HAMLYN,
Hon. Sec., R.I.B.A. Salaried Members' Committee.

ELECTION OF MEMBERS, 1 DECEMBER 1930.

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 1 December 1930, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 27 September 1930.

LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (*b*) and (*ci*) of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

Competitions

BANGOR (CO. DOWN) LAY-OUT OF SEA-FRONT.

The Bangor (Co. Down) Borough Council invite architects and town planners to submit, in open competition, designs for the lay-out of the sea-front in the Borough.

Assessor: Professor Patrick Abercrombie, M.A. [*F.*].

Premiums: £150 and £50.

Last day for receiving designs, 1 September 1930.

Conditions of the competition may be obtained on application to Mr. J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s.

[Conditions are under consideration by the Competitions Committee.]

CARLISLE: ENGLISH STREET IMPROVEMENT.

The Corporation of the City of Carlisle invite architects to submit, in open competition, designs for the façade to English Street and the Victoria Viaduct, suitable for Shops and Business Premises.

Assessor: Mr. Francis Jones [*F.*].

Premiums: £300, £200 and £100.

Conditions of the competition may be obtained on application to Mr. Percy Dalton, A.M.Inst.C.E. [*A.*], City Engineer, 18 Fisher Street, Carlisle. Deposit £1 1s.

CHELMSFORD: PUBLIC LIBRARY AND MUSEUM.

The Chelmsford Corporation invite architects to submit, in open competition, designs for a New Public Library and Museum, at a cost of £25,000.

Assessor: Mr. H. V. Lanchester [*F.*].

Last day for receiving designs, 14 June 1930.

Conditions of the competition may be obtained on application to Mr. G. E. Barford, Town Clerk, Town Clerk's Office, Chelmsford. Deposit £1 1s.

CHULMLEIGH, DEVON: PROPOSED MINISTER'S HOUSE.

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

KINGSTON-ON-THAMES: PUBLIC BATHS.

The Kingston-on-Thames Corporation invite architects to submit in open competition, designs for the erection of public baths, with the use of one as a public hall.

Assessor: Mr. J. Ernest Franck [*F.*].

Premiums: £300, £200, £100 and £50.

Last day for receiving designs, 14 June 1930.

Conditions of the competition may be obtained on application to Mr. A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-on-Thames. Deposit £1 1s.

LIVERPOOL: DEVELOPMENT OF SITE.

The General Building Syndicate, Ltd., invite architects to submit, in open competition, schemes for the development of a site at Liverpool fronting St. Johns Lane, Queen Square and Roe Street.

Premiums: £250, £100 and £50.

Conditions of the competition may be obtained on application to The Secretary, General Building Syndicate, Ltd., 36 St. Martin's Lane, London, W.C.2. Deposit £2 2s.

[Conditions have not yet been received.]

LIVERPOOL: PROPOSED PIER HEAD IMPROVEMENTS.

The Liverpool City Council propose to offer premiums of 1,000 guineas and 500 guineas in connection with a competition for the improvement of the amenities of the Pier Head. [Conditions are not yet available.]

LUTON: TOWN HALL.

The Town Council of Luton invite architects to submit, in open competition, designs for a new Town Hall and Municipal Buildings, at a cost of £250,000.

Assessor: Sir A. Brumwell Thomas [*F.*].

Premiums: £500, £300, £200, and £100.

Last day for receiving designs, 31 July 1930.

Conditions of the competition may be obtained on application to Mr. W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s.

WEST HUMBERSTONE: LIBRARY.

The Leicester Corporation propose to invite local architects to submit, in competition, designs for a Library, to be erected at West Humberstone.

Assessor: Mr. Hugh Gold [*F.*].

Premiums: £75, £50 and £25.

[Conditions are not yet available.]

WORTHING: MUNICIPAL BUILDINGS.

The Corporation of Worthing invite architects to submit, in open competition, designs for new Municipal Buildings, to be erected in Chapel Road, Worthing.

Assessor: Mr. Henry V. Ashley, V.-P.R.I.B.A.

Premiums: £350, £250, £150 and £50.

Last day for receiving designs, 5 July 1930.

Conditions of the competition may be obtained on application to Mr. J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s.

Members' Column

CHANGE OF ADDRESS.

JAMES RANSOME, F.R.I.B.A., has moved his London office from 21 Suffolk Street, Pall Mall, to 14 Great James Street, Bedford Row, W.C.1, where he practises in partnership with Lionel F. R. Coote, A.R.I.B.A., under the name of James Ransome and Coote. Telephone Holborn 9024.

MR. ALFRED H. DURNFORD.

MR. ALFRED H. DURNFORD, L.R.I.B.A., having severed his partnership with Messrs. Bethell Swannell and Durnford, will in future practise at Walter House, 418 422, Strand, W.C.2.

PRACTICE WANTED.

MEMBER wishes to purchase an old-established practice, West of England or South Coast preferred, or would entertain a partnership in a firm of standing. Apply Box 2640, c/o The Secretary, R.I.B.A., 9 Conduit Street, W.

PARTNER WANTED.

A.R.I.B.A., with good office in Bloomsbury district, wishes to meet another with view to sharing running expenses, and affording mutual assistance.—Apply Box 2853, c/o The Secretary, R.I.B.A., 9 Conduit Street, W.1.

PARTNERSHIP REQUIRED.

Member desires partnership in established practice in or near London. Experienced in alterations and additions, factory and domestic work, etc.—Apply Box 1181, c/o The Secretary, R.I.B.A., 9, Conduit Street, W.1.

OFFICE ACCOMMODATION REQUIRED.

MEMBER requires two rooms as offices near Strand, must be well lit and suitable. State rent and all particulars.—Apply Box 6248, c/o The Secretary, R.I.B.A., 9 Conduit Street, W.1.

OFFICE ACCOMMODATION VACANT.

ASSOCIATE of the Institute wishes to meet another member who will take a part share of his office which is situated near Piccadilly Circus.—Apply Box 2353, c/o Secretary R.I.B.A., 9, Conduit Street, W.1.

WANTED.

CHEST of drawers for architectural drawings.—Write Manning, 9 Smith Street, S.W.3.

Minutes XVI

SESSION 1929–1930.

At the Fourteenth General Meeting (Ordinary) of the Session, 1929–1930, held on Monday, 26 May 1930, at 8 p.m.,

Sir Banister Fletcher, F.S.A., President, in the Chair.

The attendance book was signed by 27 Fellows (including 9 Members of Council), 33 Associates (including 2 Members of Council), 6 Licentiates (including 1 Member of Council), 5 Hon. Associates and a large number of visitors.

The Minutes of the Annual General Meeting held on 12 May 1930, having been published in the JOURNAL, were taken as read, confirmed, and signed as correct.

The President announced the decease of William John Locke, Secretary of the R.I.B.A. from 1897 to 1907, elected Hon. Associate, 1908; and it was Resolved that the regrets of the Institute for his loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to his relatives.

Mr. C. Leonard Woolley, M.A. (*Hon. A.*), having read a paper on "Recent Excavations at Ur," a discussion ensued, and on the motion of Dr. J. W. MacKail, M.A., F.B.A. (*Hon. A.*), seconded by Dr. Raymond Unwin (*F.*), a vote of thanks was passed to Mr. Woolley by acclamation and was briefly responded to.

The proceedings closed at 9.40 p.m.

ARCHITECTS' BENEVOLENT SOCIETY
(*Insurance Department*).
HOUSE PURCHASE SCHEME
(for property in Great Britain only).

The Society is able, through the services of a leading Assurance Office, to assist an Architect (or his client) in securing the capital for the purchase of a house for his own occupation, on the following terms:—

AMOUNT OF LOAN.

Property value exceeding £666, but not exceeding £2,500, 75 per cent. of the value.

Property value exceeding £2,500, but not exceeding £4,500, 66⅔ per cent. of the value.

The value of the property is that certified by the Surveyor employed by the Office

RATE OF INTEREST

In respect of loans not exceeding £2,000 5½ per cent. gross
" " in excess of " 5¾ " "

REPAYMENT.

By means of an Endowment Assurance which discharges the loan at the end of 15 or 20 years, or at the *earlier death* of the borrower.

SPECIAL CONCESSION TO ARCHITECTS.

In the case of houses in course of erection, it has been arranged that, provided the Plan and Specification have been approved by the Surveyor acting for the Office, and the amount of the loan agreed upon, and subject to the house being completed in accordance therewith, ONE HALF of the loan will be advanced on a certificate from the Office's Surveyor that the walls of the house are erected and the roof on and covered in.

NOTE.—In 1928, over £20,000 was loaned to architects under this scheme, and as a result over £100 was handed to the Benevolent Fund.

If a quotation is required, kindly send details of your age next birthday, approximate value of house and its exact situation, to the Secretary Architects' Benevolent Society, 9 Conduit Street, London, W.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

R.I.B.A. JOURNAL.

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